SEEING THE MIDDLE WEST

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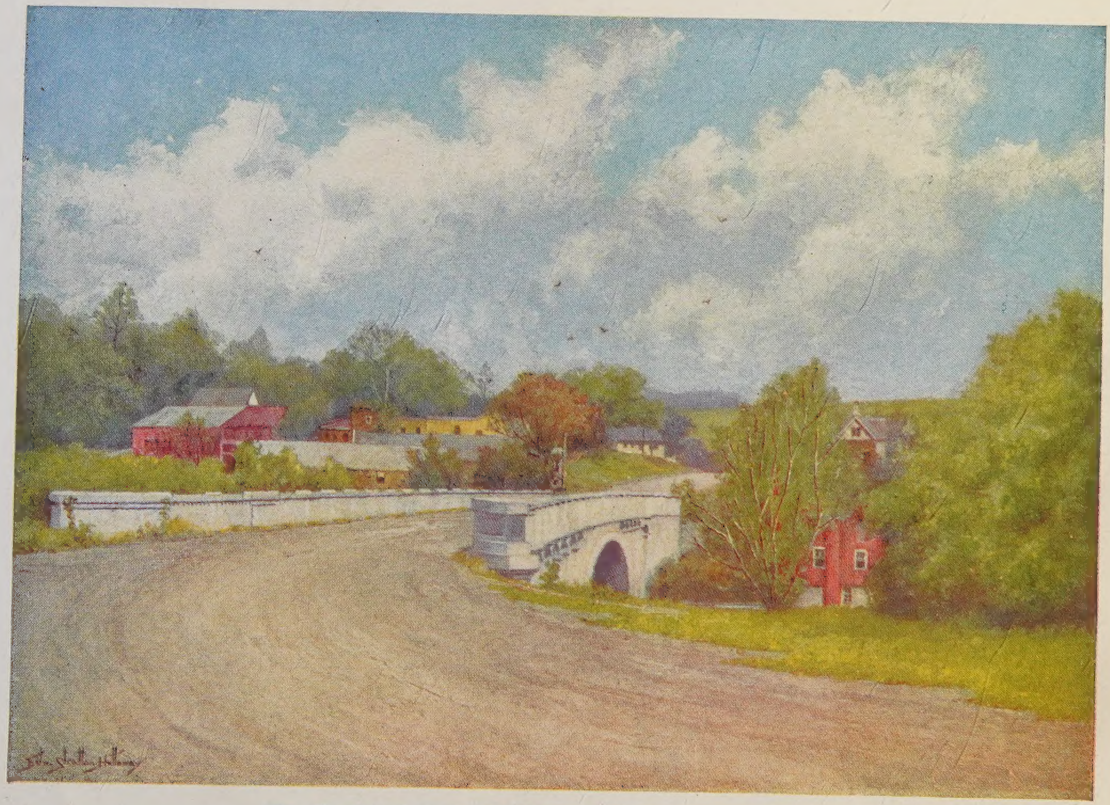

THE CHARM OF THE OPEN ROAD IN SOUTHERN MINNESOTA

SEEING THE MIDDLE WEST

BY

JOHN T. FARIS

AUTHOR OF
"SEEING THE FAR WEST," "SEEING THE EASTERN STATES," ETC.

WITH FRONTISPIECE IN COLOR
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PHILADELPHIA AND LONDON
J. B. LIPPINCOTT COMPANY
1923

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FOREWORD

AS the train drew out of Chicago, a man in the parlor-car settled himself for a nap. "If you are wise, you, too, will sleep," he said to his companion. "Not one thing to see until we come to the Mississippi River. Then for another long rest."

Yet the train was to take him through country which the French explorers and adventurers made historic when they passed to the Mississippi; along the stretches of the Illinois River, where they guided their canoes; within sight of Starved Rock, stronghold of LaSalle and Tonti in the days before William Penn came to Philadelphia; in regions where Abraham Lincoln had his first military experience when in pursuit of Black Hawk. To say nothing of the beauty of the rolling prairies, the pleasing forests, the ever changing landscape that makes Northern Illinois so delightful!

The sleepy traveller would have sympathized with the resident of Indiana who, when reviewing his summer journeyings for fifteen years, told breathlessly of eight years of wandering in the British Isles and the Continent of Europe. "How about your own country?" he was asked. "Oh, we didn't think it worth while to travel at home, though we were compelled to be content here during the War and for several years afterward. Soon, though, we can go back to our beloved Europe." And he knew nothing of some of the wonderful beauty spots in Michigan, Wisconsin, Minnesota, and even in his own state!

What surprises those states, and other states in the Middle West, have in reserve for those who have passed them by for foreign lands or for other parts of their own land! History and Nature combine to make remarkable the section of the United States most peopled by the Indians, who had a fashion of choosing the best bits of the continent. A student of Indian life calls attention to the fact that eight of the fourteen states whose territory was most thickly inhabited by the primitive Americans are in the Middle West, and that seven of these eight are to-day among the most populous states of the Union.

Special interest attaches to this rich, beautiful land —whose enormous resources have not yet been measured—because it is such a distinct historical unit. As Hinsdale has pointed out in "The Old Northwest": "It was first discovered and colonized by the French. It was the occasion of the struggle for dominion between France and England in North America. It was the theatre of one of the most brilliant military exploits of the Revolution. The disposition to be made of it at the close of the Revolution was one of the most difficult questions settled at Paris in 1783. After the War, the Old Northwest assumed a constantly increasing prominence in the national history. It was the original public domain, and the first and the most important territory ever organized by Congress."

And it was in the heart of this land, whose history lives again for the traveller, that the man in the parlor-car thought there was nothing worth seeing!

While passing through a portion of the territory described in this volume, the author received marked courtesies from Cleophas C. O'Harra, Ph.D., LL.D.,

President of the South Dakota State School of Mines; from George A. Duthie, Supervisor of the Black Hills National Forest, Deadwood, South Dakota; from J. F. Conner, Supervisor of the Harney National Forest, Custer, South Dakota. The help given by Wallace I. Hutchinson of the Headquarters Staff of the United States Forest Service at Washington, is noted with appreciation. Grateful acknowledgment is also made to Edward Stratton Holloway, the genial artist from whose painting the frontispiece of the volume is taken, and to whose skill is due the pleasing appearance not only of this volume, but of the entire series of which it is a part.

J. T. F.

PHILADELPHIA, 1923

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SEEING THE MIDDLE WEST

CHAPTER I

ON THE GREAT LAKES

WHEN his physician recommended a steamship trip at least a week long, the business man said the prescription could not be taken; he could not go to Europe; the minimum of two weeks required for the round trip would be entirely too long.

"Who said anything about Europe?" smiled the man of medicine. "I was thinking of the Great Lakes. Has it never occurred to you that it is possible to make a voyage from Buffalo to Chicago, or from Buffalo to Duluth, and return, close to two thousand miles of most interesting travel, on a steamer as palatial as many of the greyhounds of the sea? And all the way you will be within easy reach of land; you will see the marvellous fleet that carries ore and grain from the West, and docks where the provisions for loading and unloading seem almost miraculous; islands and rivers, rapids and canals will supply infinite variety, while bays and inlets of which your boat will give you merely a glimpse, will make you wish you had a month instead of a week for the journey. And history! There will not be a chance for novel-reading if you once realize that you are following in the steps of explorers and soldiers to whom every irregularity of the varied shore lines became familiar; of pioneer navigators whose frail craft braved the treachery of the winds and the

perils of the cliffs; of trappers and fur traders who were the advance agents of the builders of cities and towns. What more can you desire?"

The great passenger steamer open to all, or the freighter on which only owners or their favored friends may taste the delights of provisions for comfort akin to those on a private yacht, is a wonderful contrast to the forty-five ton *Griffin,* built near the present site of Buffalo in the spring of 1679, blessed by Father Hennepin, and guided by sailors who knew not only how to manage the sails but also how to man the guns, under the guidance of LaSalle, the builder who was dreaming of the time when the lakes would carry "an inconceivable commerce."

It is not easy for those who see the Great Lakes as they are to-day, to picture them as they were two hundred and fifty years ago, in the days of LaSalle whose eyes saw only a waste of waters and the forbidding forests about them, though his mind pictured the prosperous towns that would fringe the shores and the hundreds of vessels that would ply from port to port when the country should be developed. But it is safe to say the prophet had not the slightest notion that the lake fleet would grow until the new vessels built in a single year would cost tens of millions, that close to one hundred million tons of freight would be carried annually, that in one day there would pass through the locks of a lake canal more than one hundred vessels.

Almost exactly one hundred and thirty years after the voyage of LaSalle's *Griffin,* a second historic vessel made its way from end to end of Lake Erie— the *Walk-in-the-Water*, first steamboat on the Great Lakes. For a time it paused at Cleveland. There must have

been some in the crowd of watchers and cheerers who, twenty-two years before, were with General Moses Cleaveland when he settled at the mouth of the Cuyahoga. Probably they thought how much easier their journey would have been if they, too, could have had a *Walk-in-the-Water*. But theirs was the day of small things, when the daring vision of their leader enabled him to see the growth of the infant Cleveland until it should be as large as Windham, Connecticut, a town familiar to his pilgrims from the Nutmeg State to the Western Reserve.

It was seven years after the visit to Cleveland of the pioneer steamboat before the beginning of the developments that command the attention of the visitor to that city. The opening of the Grand Canal that gave connection with the Ohio River, was followed soon by the first government appropriation for the harbor. In 1830 one hundred and forty-three steamboats were on Lake Erie. In time the city on the banks of the Cuyahoga became a great shipbuilding point, a pioneer in the ingenious fabricated method of construction which has provided monster freighters in from fifty to ninety days.

The stream that gives ingress from the harbor for the ships which claim Cleveland as their birthplace, as for those that hail from other ports, was once a line of division rather than a bond of union. Cleveland Village, Ohio City and Brooklyn Village clustered about the sinuous stream, and the first bridges supplied abundant openings for contention. But the day of rivalry has passed; the old villages have merged, and the primitive bridges, after giving place to drawbridges that frequently interrupted street traffic for an unconscionable

time, finally have been succeeded by a structure of symmetry and beauty, with approaches more than half a mile long.

Some day the city that has discarded drawbridges will rejoice to see relegated to the scrap heap the ancient railroad station on the Lake Front that is in such startling contrast to the developing Civic Centre on the bluff, where the County Court House, the Federal Buildings, the City Hall, and the Civic Auditorium have risen in fulfilment of the dream of that prince of city planners, D. H. Burnham, who wanted Cleveland to take full advantage of the rare setting on the eminence that commands both the lake and the city.

The visitor who pauses there in his lake journey will carry away also memories of the memorial to James A. Garfield, on a bluff in Lake View Cemetery, and of the Soldiers' and Sailors' Monument in the Public Square in the heart of the business district. He will think of Euclid Avenue with a regretful "How are the mighty fallen!" for he will see that business has been crowding out the residences that once made the avenue memorable. But there will be left a pleasing memory of the churches, for some of them speak eloquently of the New England origin of the city. And it will not seem possible to forget the wonderful Art Museum, whose Ionic columns have such fitting background in the sylvan retreat provided by Wade Park.

Cleveland is but one of eight harbors on the Ohio shore where iron ore is received. Conneaut, Ashtabula, Fairport, Lorain, Sandusky, Huron and Toledo have their share in the traffic brought by the freighters that look as if they had been subjected to the tug-of-war of giants who have succeeded in stretching them to what,

THE PUBLIC SQUARE, CLEVELAND, OHIO

at first, seem ungainly proportions. Yet they appear anything but ungainly when they draw up at the dock to discharge or receive cargo. One of the worth-while sights of the Lake Erie ports is the method of loading one thousand tons of coal in an hour, by the overturning into yawning hatches of the contents of great steel cars which are lifted bodily from their trucks.

Both freighters and passenger steamers pass close to a notable group of islands northwest of Sandusky. Five of these are large enough to have names, and there are ten or twelve others, too small for such distinction. But every one of them was marked for all time by the glacier that passed over the lake. Geologists as well as more every-day tourists have studied the deep grooves cut by this glacier as it moved from east to west, and have marvelled at what have been called the best glacial markings on the continent.

The largest of this group of islands, Pelee, belongs to Canada, but the most famous, South Bass, is a prized possession of the United States. Few Americans will recognize it, however, until it is called Put-in-Bay, the name of the harbor where the patient Commodore Perry put in with his fleet in 1813, from which he sailed on September 13 to meet the British fleet. It seems impossible to traverse the waters without recalling the intrepidity of the hero who, when his flag-ship, the *Lawrence,* was reeling under him, took from aloft the banner bearing the immortal words, "Don't Give Up the Ship," and passed in a rowboat, under the enemy's guns, to the *Niagara,* where he raked the enemy until the white flag was raised and he was able to scribble on the back of an old letter—which rested on his hat as a desk—the message to General William Henry

Harrison, "We have met the enemy and they are ours; two ships, two brigs, one schooner, and one sloop."

The officers of the American fleet who were killed in the battle were buried on the island, not far from the notable monument commemorating the brilliant victory, a unique structure whose fluted columns, rising between two temple-like buildings, cause a reflection in the water that makes the visitor feel he is on the banks of the Nile.

The hero of the battle has still another memorial on South Bass Island—Perry's Cave, the largest of a number of grottos. It is small yet interesting, as are also Crystal Cave, lined with what have been said to be the largest crystals of celestite in the world, and Paradise Cave, with its fine stalactites.

For one hundred and fifty miles after leaving the island of the caverns, the lake steamers follow the course of the vessels that fled after Perry's victory—that is, unless they put into Toledo, the beautiful, bustling city at the mouth of the Maumee, whose tremendous strides in recent years have made Ohio more than ever grateful because the contest of earlier days with Michigan ended in the assurance that the bit of Lake Erie where the city has its frontage belongs to the Buckeye State, rather than to the northern claimant.

Back once more to the track of the mighty fleet of freight steamers—ore carriers from Duluth and Marquette, wheat vessels laden with the product of the great bonanza farms of the Northwest, coal barges filled to the decks with the black diamonds from the mines. As the waterways converge toward the mouth of Detroit River they seem to become more numerous;

single steamers, large and small, as well as many processions of barges, linked together in long tows, are constantly in sight, each bound for its destined port.

Ordinarily the water is smooth, and the passage is easy to the Detroit River, which has been called "the greatest artery of commerce in the world," because along its twenty-seven miles of channel—Detroit means "the Strait"—must pass all the vessels to and from Buffalo, Chicago and Duluth, following the stream that is the sole outlet of the water from Lake Superior, Lake Michigan and Lake Huron.

The early French explorers had a vision of the importance of the location, but thirty years passed after the coming of the first of them before a fur-trading post was planted on the site of Detroit. Antoine de la Motte Cadillac, who was responsible for the beginning of this southern outpost for dealing with the Indians, is honored by the prominent square named for him in a city that is more than fifty years older than Pittsburgh, and more than one hundred and twenty years older than Chicago, where the ownership has changed five times, where Indian sieges and the torch of the conqueror paved the way for the plucky development that has made it the fourth city on the continent.

The one hundred inhabitants of 1701 lived within a plot of 192 square feet, surrounded by palisades. In 1915 the area of the city was twenty square miles. Three years later Detroit had quadrupled in size. In 1920, when the census report grieved the citizens by showing a population of seven thousand short of a million, the city and its surroundings had been plotted to care for two million and a half.

This marvellous growth—which has been called the

city miracle of the first fifth of the twentieth century—led an observer to say that the rest of the state used to jeer at Detroit as the city which sat beside its Strait and watched the commerce of a continent pass by. Detroit took the jeers to heart and determined to catch some of that commerce. It succeeded.

Diagonal avenues and circular streets make the visitor think of Washington. But he can think only of Detroit when he stands on Cadillac Square, with its overshadowing City Hall, passes down Griswold Street, the Wall Street of Michigan, saunters in the small park areas that beautify the down-town section, or pauses before the tablet on the Post Office building that tells of the departure of the British in 1796, in belated observance of the terms of the treaty of peace that closed the War of the Revolution.

With new vision of its own possibilities Detroit reaches out to the north and claims for her own not only Belle Isle, the city's pleasure resort at Grosse Point, but also the matchless boulevard site between, where the cooling breezes of Lake St. Claire will make the passage by land almost as delightful as that by water. The boulevard will afford, on clear days, a view across twenty-five miles of water into Canada, where—at the southern end of the lake—the shore line is broken by the ending of the River Thames, memorable in the annals of the War of 1812 because of the defeat there, in 1813, of the retreating British Army by the Americans under General Harrison.

The shallow but beautiful lake that stretches between St. Claire River and the Detroit River was named by LaSalle because, while sailing in the *Griffin*, he first saw the water on August 12, 1679, the birthday of

YACHTS AT BELLE ISLE, DETROIT

AT THE DOCKS, DETROIT

Sainte Claire—Clara d'Assizi, founder of the order of "Poor Claires." As he came to the northern end of the lake he was dismayed by the shallows of the St. Claire Flats. In the words of Louis Hennepin, one of his companions, "We found the mouth of the St. Claire River divided into many narrow channels, full of sand-bars and shoals." It proved necessary to use tow-ropes pulled by a dozen men before they were able to get into deeper waters.

Those who follow in the wake of the *Griffin* feel anything but dismay when they approach the Flats, for the waters are gay with villas and clubhouses and hotels. This is "Little Venice," the playground of Detroit, where hundreds of summer houses are built almost in the water, where the motorboat is a necessity, and the automobile has no place.

The passage of the steamer through the canal amid the low, green islands is an event both for the cottagers and for the passengers. A deck-hand places a small cannon on the bridge. The wondering observers have little opportunity to guess as to its use, for soon a gun is fired from the pier of a large hotel. Instantly the gun on the bridge sends an answering shot. For some time the captain is busy responding to greetings. From cottages large and small, from other hotels, from smaller pleasure boats, they come in rapid succession. Little groups standing on the balconies or on the piers vie with each other as they use their megaphones.

One day, as the great vessel was passing the last cottage, a party of young people on the steps had shouted their message and the captain had responded. Then he took his hand from the whistle cord, and looked ahead. Those whose eyes were still on the cottage were

treated to a pantomime. A little lad was reaching for the megaphone. An older member of the party held it out of his reach. He seemed to be saying, "You're too little; the captain won't pay any attention to you." But the boy's pleading proved effective; the megaphone was placed in his hands. Instantly he raised it to his mouth, and pointed it toward the vessel, which was already drawing away from the cottage. Then his pleading message came over the water:

"Captain! won't you salute me, too?"

Hearts were stirred as they heard the request. The captain's heart was reached too, for he pulled the whistle-cord, and sounded such a salute as had not been given before that day.

Once more the megaphone was lifted by the little hands, and the answering call was heard faintly:

"Thank you, captain!"

But by this time the vessel was heading away toward Lake Huron, where—two days after the struggle with the shallows of the Flats—the *Griffin* encountered such a fierce gale that LaSalle and his men gave up hope, while the pilot berated his leader for bringing him to perish in a "nasty lake," where he would "lose the glory he had acquired by long and happy navigation on the ocean."

After Lake St. Claire, Lake Huron seems an ocean; its extreme width, if taken diagonally from Saginaw Bay into Georgian Bay, is, like its length, about three hundred and fifty miles. In the lower part of the main lake there are practically no islands to break the broad sweep of water, and the eye turns to the Michigan coast where low-lying shores, bold headlands and forested inlets, follow one another until the generous

peninsula leads around into the deeply indented Saginaw Bay, or, as Hennepin called it, "Sakinaw Bay."

Beyond Saginaw Bay the shores are in many places wild as they were when LaSalle and his crew looked upon them from the deck of his careening schooner. The sight of the mouth of the Au Sable River makes the sportsman want to follow the waters back into the interior wilderness where the forests still wave in spite of the worst efforts of the lumbermen, and where the fish leap alluringly. On a bit to the islands of Thunder Bay, where the *Griffin* found safe anchorage before continuing the tempestuous voyage around Presque Isle, there encountering a second great gale, where waves lashed over the frail vessel.

Not far from the path of the Duluth-bound steamer is Manitoulin Island—favorite refuge of the Indians—where many of the early French explorers paused in their expeditions. The island belongs to Canada, but a little farther on, at the very head of the lake, is an island that belongs to the United States, which is much more famous both for historical association and for beauty—Mackinac Island, where Michigan has erected a State Park. This was the Michilimackinac of the Indians and the early French explorers; the name meant Great Turtle, so called because of the shape of the island.

It was in 1670 that the Jesuits established themselves at Mackinac. Their reasons were stated wisely:

"The island forms the key and the door, so to speak, for all the peoples of the South, as does the Sault for those of the North; from these regions there are only those two passages by water, for very many nations. This circumstance makes it very easy both to instruct

these poor people when they pass, and to gain ready access to their country."

In the wake of the Jesuits came the fur traders. The summer visitors are shown the relics of the long occupation of the American Fur Company, which equipped on the island trading brigades. These were sent out in their bateaux to distant points on the lake and beyond. The old fortifications—created by the British after the dreadful massacre at Old Mackinaw, on the mainland—add impressiveness to this treasure island, while the signal station on the ruins of Fort Holmes, where the British entrenched themselves in 1812, affords a glorious prospect across the Straits. There shipping is almost always in sight.

When the steamship enters the delightful little harbor, passengers who, perhaps, have made up their minds that they would remain on board, become enthusiastic by reason of the quiet beauty before them. As soon as their vessel ties up at the long wharf, they are apt to rush ashore, that they may see the fort and the old trading post, the mission and the other curious buildings, as well as the singular rock formations. There is Arch Rock, far above the water, a rugged limestone natural bridge, one hundred and forty feet high and three feet wide, and also Sugar Loaf, a lonely pinnacle more than one hundred feet high.

Mackinac Island became American property by the treaty of 1783, though it was not given up by the British until 1795. It was retaken by the forces of Great Britain in 1812, only to be restored once again in 1814 by the Treaty of Ghent.

It would be difficult to find in America a like area—the island is only about three miles long and two miles

wide—which has so much claim to the attention of both the historian and the seeker after beauty. No wonder half of it here has been made a National Park and Military Reservation. And no wonder it is thronged by visitors who, from this as a centre, go across the Straits, which are from five to thirty miles wide, and from thirty to forty miles long; to St. Ignace on the mainland where the Indians brought the body of Marquette for permanent burial; or on into the near-by waters of Lake Michigan, to which the Straits lead.

Close to the outlet of Lake Michigan the steamer passes, within hailing distance of the island realm of King Strang, the sizable Beaver Island. To this remote territory James Jesse Strang, a disgruntled leader of the Mormons at Nauvoo, Illinois, betook himself and some of the followers. They lived in a town called St. James, and they supported themselves by fishing, trapping, and cultivating the soil. In 1850, when there were about two thousand people on the island, the Kingdom of St. James was organized, and Strang was crowned king. A royal press was established, and foreign ambassadors were appointed. The prosperity of the nation was interrupted in May, 1851, when the king was arrested and taken to Detroit. Followed swiftly his release, his election to the legislature, his assassination, and the demolition of the capital city by the fishermen of the lake, who did not object to the pretensions of the leader, though they did oppose the presence of the people, who interfered with their business.

Perhaps sixty miles from the scene of the brief reign of King Strang is another island celebrated in the annals of the lake—Washington Island, guarding

the entrance to Green Bay, Wisconsin. There, in September, 1679, LaSalle found a cargo of furs waiting for his *Griffin,* brought this far after much travail. Dividing his men into two companies, he put one party on board, with instructions to return to Niagara. From there they were to send the furs to market and sell them for the benefit of his clamoring creditors. The intrepid leader, with fourteen companions, planned to embark in four canoes, and push on down the lake.

But the hungry creditors were not to reap the fruits of that heart-breaking voyage. The trip to Niagara had barely begun when a sudden storm caught the vessel unprepared. For four days the wind blew and the waves boiled. The fate of the vessel has always been a mystery, for no member of the crew lived to tell the tale. During the storm LaSalle and his men waited on the island, living on pumpkins and Indian corn and the flesh of a porcupine. Then, fearing the worst for the *Griffin,* they took to the boats and began to beat against the incessant storms that broke on them as they battled southward. When telling of that voyage, Father Hennepin wrote truly, "Those who shall be so happy as to inhabit that noble country cannot but remember with gratitude those who discovered the way by venturing to sail upon unknown lakes."

From that day mariners on the lake have dreaded the rocky shores of the peninsula that separates Lake Michigan from Green Bay. The entrance to the bay has been called "Death's Door;" there rocks and currents combine to make the name really descriptive.

To-day it is possible to avoid many of the dangers of Green Bay by the use of the canal to Sturgeon Bay that cuts the Door County Peninsula, close to the point

where Marquette crossed in 1674, and Tonti in 1680. But lovers of the beautiful will wish to go farther north, to the Peninsula State Park, where forests and rugged bluffs abound.

Down the western shore from the Door Peninsula, past Sheboygan, the chair city, is Milwaukee, at the mouth of the Milwaukee River, whose course, most of it close to the shore, ends at the crescent-shaped bay beneath the sightly bluff eighty feet high. This bluff provides a wonderfully advantageous location for the homes of those who do not stop to think that, within a few miles of where they live in such comfort, LaSalle with his fourteen hungry, storm-tossed companions rejoiced when they found the body of a deer, which had been killed by a wolf. One hundred and twenty-one years later four traders settled at Milwaukee, and by 1851 the place had grown until it could boast a post office with "1,119 private boxes, 39 private drawers and 5 employees."

The bluffs border the lake almost to Chicago. From the water the shore is so attractive that the passenger longs to ramble there. Fortunately those who are able to do so are not disappointed. The bluffs are broken by deep wooded ravines that offer unlimited opportunities to explore where the wild growth lingers as it was in the days of the Indians and the pioneers. When one of these ravines is followed to the beach of what looks like the sea, the chance to wander is not ended; around the jutting headland that bounds the view is a fresh reach of sand to be conquered. Only those know the enticements of the varied shore below the tree-clad bluffs who have forgotten time in their scramble to see what lies beyond.

Even on a clear day it is impossible to see across the lake to the first of the ports of West Michigan. From Chicago and Milwaukee boats make frequent trips to those near-by resorts, as well as to the busy centres farther north. Of these perhaps the most famous historically is Ludington, which is central on the Michigan shore. For when Marquette, after his tour of the Illinois country, was making his way north along the shores of the lake, vainly hoping to live to reach Mackinac once more, "he perceived a river, on the shore of which stood an eminence that he deemed well suited to be the place of his interment." To this place—the site of Ludington—he was taken by his faithful Indians who there made for him a cabin of bark. When he died, "with a countenance beaming and all aglow," he was buried on May 19, 1675. In 1677 a company of the Lake Superior Indians took the body in their canoes two hundred miles to St. Ignace. There, in 1877, a monument was erected over his grave.

From St. Ignace, along the south shore of the Upper Peninsula of Michigan, past the ever attractive Cheneaux Islands, the distance is not great to Detour, or the Turn, on one of the passages to the channel that connects Lake Huron and Lake Superior. The name was chosen in 1669 by Father Allouez. In going to Lake Superior he doubled the cape between the mainland and Drummond Island, and navigators to-day who go from Lake Huron or Lake Michigan choose the same course.

Beyond the Detour is the beginning of the sixty-two miles of St. Mary's River which connects the lakes. The entire course is beautiful; the hills rise superbly on both sides. But the place of greatest interest is the

half-mile where the water plays over ledges of rocks, covering much of the twenty-foot descent between Lake Superior and Lake Huron. These Rapids of St. Mary have been a centre for history making for nearly three hundred years. That history goes back to 1643, when the name Sault Ste. Marie (the Rapids of Ste. Marie) was given by Father Raymbault, who preached there to the Indians of the Upper Lake.

Galinee's map of 1669 owned complete ignorance as to the country beyond the Sault; to him it was "The Great Beyond." This unknown country was claimed for Louis XIV by Daumont de Saint Lusson, who erected a cross and a pole with the arms of France attached.

The rapids at the Sault interfered with the comfort of the Hudson's Bay Company in transporting their bateaux around the falls, so, in the last years of the eighteenth century, they built, on the Canadian shore, a timber lift lock, nine feet high, to which boats were taken by a gradual incline. In this way about half of the fall in the stream was provided for; the other half was conquered by oxen which towed the boats through the balance of the rapids. The remains of the lock were uncovered nearly a century later.

The slowly growing traffic in the St. Mary's River led to talk of a canal, yet there was great opposition to it. Henry Clay voiced the opposition when, in the course of a debate at a session of Congress, he said that these Western waters were "beyond the farthest bounds of civilization—if not in the moon."

For a time vessels bound for Lake Superior were hauled around the rapids on rollers, as buildings are sometimes moved. The process was long and difficult;

it is recounted that seven weeks were required for the passage of the *Independence,* first steamer on Lake Superior.

In 1851 a strap railroad was built around the rapids; horses drew the cars. Then the railroad men joined their protests to those of other opponents of a canal.

But the discovery of iron and copper made the building of a canal inevitable. In 1852 Congress gave Michigan 750,000 acres of land to aid in building the waterway, and so enabled the state to undertake the task which she had been trying to accomplish since 1837.

The difficulty of the work of building can hardly be understood to-day, though it has been pictured by a historian:

"The nearest machine shop was several hundred miles away; the nearest telegraph station was at Detroit, five hundred and fifty miles away; powder was brought from Delaware and Connecticut; six weeks were required for a letter to reach New York and for the answer to be returned; agents had to be sent East to board ships in New York harbor and secure emigrant labor. At one time the two thousand men on the job worked all winter, when the cold was sometimes thirty-five degrees below zero. Men were continually at the head of each runway for barrows, where they watched for indications of frostbitten faces, and rubbed them with snow."

That first canal was only thirteen feet deep, while the locks were but seventy feet long. The first vessel, the *Columbia,* was of only 132 tons burden, and only 1,449 tons of freight passed through that year. In 1870 the Weitzel locks, 515 feet long, were built, while in 1888 the Poe locks, 800 feet long, were begun. The

THE AMERICAN LOCK, SAULT SAINTE MARIE, MICHIGAN

Canadian lock, opened in 1895, is 900 feet long. And the latest development, only recently completed by the United States Government, is a lock 1,350 feet long. To-day the traffic through the canal is several times greater than that which uses the Suez canal.

With the canal the adequate development of the ore lands of Michigan and Minnesota has been possible. And Michigan has shared in this wealth; the lands given to the State by Congress to help in building the canal—this was long before it was taken over by the Government—proved to be some of the best of the ore lands. The great Calumet and Hecla copper mine was developed on these lands. The total cost of the improvements, both by Canada and the United States, has been about $32,000,000. But who can measure the benefits?

From the Sault the approach is gradual to Lake Superior. First comes White Fish Bay. Then the ship plunges into the vast expanse of the greatest body of fresh water on the globe—457 miles long, 167 miles wide, with a maximum depth of 1,000 feet, with shores rocky, towering, impressive, and surroundings wild and picturesque, where big game still lurks in the forests, and those who delight to hunt with the camera have abundant opportunity for sport.

For some reason at least one of the scenic marvels of the Lake Superior country attracted more attention two generations ago than is the case to-day. Possibly this fact is to be accounted for by the exploitation of other marvels farther west. But it is a mistake to forget the Pictured Rocks on the south shore between Point Au Sable and Grand Island. The fourteen miles of sandstone cliffs that were once thought of as the most

famous of our natural phenomena are the western portion of the north range of hills that cling to the south shore. Their precipitous sides sometimes rise two hundred feet above the water. Waves have eroded them, winds have helped to fashion strange pillars that guard the portals of caves far above the water, and the ice of ages has aided the transformation. The variety of form and coloring is so great that the visitor is continually exclaiming at what opens out before him as his vessel slowly passes by.

The Chimneys, the Miners' Castle, the Sail Rocks, are all striking, but chief place must be given to Grand Portal, *La Grand Portail* of the voyageurs, cut in a great cliff.

But before the Grand Portal is reached the Chapel appears, close to the mouth of the Chapel River, where the voyageurs delighted to give a ceremonial ducking to those who were making their first trip. This gem of nature's architecture is forty feet above the lake.

The Pictured Rocks are glorious in fair weather, but the lake mariner has learned to dread them when the wind blows and the waves are high. All the south shore country, from Grand Marais to Grand Island, past Marquette, and on to Keweenaw Bay has been the scene of countless epic struggles with the storms. Most of these stories can never be told, but some of them are described graphically in the reports of the United States Coast Guard, whose pages are devoted to the activities of the brave men who patrol the coasts and go to the rescue of endangered vessels.

The chief port of this south shore country is Marquette, the shipping port for one of the world's greatest iron ore districts. The immense concrete

dock, the bluffs one hundred feet above the lake, the boulevard to Presque Isle Park, on a headland close to the city, divide the interest of the traveller. But Presque Isle is noted for more than its beauty; it was given to the city by Congress in response to the persistent urging of Peter White, the iron ore magnate, who—when the city was reluctant to accept the gift because of the cost of maintenance—promised to improve the property and keep it up for five years. Much of the roadway between the city and the headland that is "almost an island," had to be built where water was in the way, but it was constructed, to the joy of all Marquette and her friends.

Between Marquette and Keweenaw Point are the curious Huron Islands, whose wooded, precipitous crags are the resort for many thousands of birds, particularly herring gull. In the season some of the smaller islands are literally covered with their nests. The fact that they are in a United States Bird Reservation seems to have become known to the gulls! The largest of the islands is a mile and a half long, and a quarter of a mile wide. All are well wooded, white pine and arborvitæ trees finding there a congenial growing place.

Perhaps twenty-five miles to the west of the Huron Islands is the entrance to the canal that enables the lake traffic to cut across Keweenaw Point, the peninsula with a backbone of hills where copper has been mined in amazing quantities. Ten great mines are tributary to Hancock and Houghton, bustling cities on the Point, while Calumet, a little farther out on the peninsula, has nearly as many mines in the surrounding country. Among these are the famous Calumet and Hecla mine,

as well as the Tamarack, whose depth of six thousand feet has given it the name of being the world's deepest mine. Close to Calumet and Houghton are the plants of two of the greatest stamp mills.

The beginning of commercial copper mining was at Copper Harbor on Keweenaw Point, and none of the mines developed since have been at any great distance from there. Thus the peninsula is full of interest to the historian; almost every name on the map speaks of the past. In Keweenaw Bay Douglas Houghton, geologist, to whom the first copper development was due, was drowned one day in 1845, while the town of Allouez was named for Father Allouez, who, in 1667, told of "passing from island to island, and noting one island at least twenty leagues long, where were found pieces of copper." The large island was Isle Royal, where copper was mined by the Indians long before the coming of the white man.

The headquarters of Allouez were for a time on Chequamegon Bay, the first great indentation on the Wisconsin shore of the lake. There he had "a little chapel of bark." For a time he was successful, but he was led to abandon the mission because the Indians broke down the feeble walls of the building and stole his provisions.

To the west of the bay of the destructive Indians is a peninsula which, even since the coming of the white men, has been illustrating a geologic process. Once the peninsula extended miles farther into the lake, but the waves and currents cut into the sandstone until islands were formed. The group of Apostle Islands is the result. Some of these islands, according to David Dale Owen, geologist, who wrote in 1849, have been

CLIFF ON AU TRAIN ISLAND, LAKE SUPERIOR

AMONG THE HURON ISLANDS, NEAR MARQUETTE, MICHIGAN

UNLOADING COAL AT THE DULUTH DOCKS

formed in comparatively recent years. Ile au Chéne (Oak Island) is one of these.

The Apostle Islands cover about four hundred square miles; the largest of the group, Madeleine Island, is thirteen miles long, while Bear and Outer Islands are each about six miles long. All are characterized by great cliffs of sandstone, and by forests of cedar, birch, aspen, hemlock, and pine. Here and there are natural meadows, while frequently there are grottos, pillars and arched openings through which the waves dash.

From the Apostle Islands there is a final stretch of seventy-five miles of wild shore and pleasant water to Superior and Duluth, the great shipping points for iron and coal and grain, which share what has been called the finest harbor in the world. When the steam vessel glides across the harbor and ties up at the Duluth dock, within sight of marvels of development on the water and sturdy business structures on land, it is rather startling to be told that the place was not even named until 1856. Then the offer of two lots in the infant port city for an appropriate name led to the suggestion that it would be fitting to honor the Sieur DuLhut, French trader and first white man in Minnesota. Fortunately the name was changed a bit for the sake of euphony.

CHAPTER II

AROUND WATER BOUND MINNESOTA

"BUT Minnesota is not water bound!"

It was one of those tiresome literalists who made the objection to the proposition that a journey by water around the borders of Minnesota would be an unusual experience.

The man who didn't enjoy being quite so literal had a reply ready:

"Well, if Iowa's original request for a northern boundary had been acted on favorably by Congress, or if Minnesota should some day give to Iowa the rich section of the state south of the Minnesota River, between the Mississippi River and the eastern boundary of South Dakota, the state would then be surrounded by water except for a few portages that would help to give variety to the journey.

"Think of the succession of waters! Begin at Hastings on the Mississippi. Ascend that stream to the mouth of the Minnesota. Go up that winding stream to its source in Big Stone Lake. Enter Traverse Lake, and follow its outlet, the Bois des Sioux, and then the Red River of the North, in the wake of Indian voyageurs, fur traders and settlers. Take the West Roseau River that keeps so close to the northern boundary of the state that it might as well be the boundary. Portage to the Lake of the Woods, and cross the waters where the boundary line between the United States and Canada plays acrobat after a fashion as roundabout as the deliberations of the Com-

mission that determined it. Float down Rainy River and skirt Rainy Lake. Then, by various portages, lakes and rivers, trace the crooked international boundary to Lake Superior. Go along the rugged shore of the greatest of the Great Lakes, to Duluth and beyond. Finally, get across to the St. Croix River and follow the track of the Sieur DuLhut, who found its waters in 1679, on to the junction with the Mississippi near Hastings.

"And the deed is done! The trip around water-bound Minnesota has been made."

"No, it would not be made; it cannot be made," the literalist objects. "For Minnesota will never give up such a choice portion of her inheritance even to such a good neighbor as Iowa!"

Of course not! But why spoil a good trip by being too captious? The traveller who follows the water route indicated will gain such an idea of the grandeur and the romance of the state that he will be ready to forget the countries south of the Minnesota River—until he has opportunity to go to these also; then he will not wonder that the North Star State cherishes them among her choicest possessions.

Once the territory of which Minnesota is a part was a part of New France. France gave up what is known as Minnesota East to England in 1763, and transferred Minnesota West when Louisiana was bought in 1803. The line between the two portions of the territory may be drawn, roughly, from the Lake of the Woods to Lake Itasca, and thence south to the Iowa line.

Now for the journey around water-bound Minnesota—the state of furs and pines and of ten thousand glacier-made lakes, of iron and copper, of

Indian troubles and railroad scandals, of sturdy settlers and contented descendants.

Among the reasons for the contentment of those who dwell in Minnesota is the fact that, when Congress was trying to christen the territory, the wild advocates of the name Chippeway did not succeed in fastening that title on the Land of the Lakes. There were others who advocated Jackson or Washington; but the final decision was so satisfactory to the men who attended the Stillwater Convention of 1848 that they decided to retain the name.

This was quite different from the choice—made in 1781—by Thomas Jefferson and his fellow committeemen for that part of what was to be known as the Louisiana Purchase, extending northwest to the Lake of the Woods. He thought that Sylvania should be its name. Evidently he did not stop to think of the objection that might be raised by the state for which William Penn took out his copyright on that title.

Ideas of the geography of the vast region bought from France in 1803 were quite vague. Even as late as 1832 it was stated by a geographer that the St. Peter River enters the Mississippi River fifty miles below St. Anthony (Minneapolis), and that it was navigable one thousand miles to its source. The true figures are more nearly seven miles and three hundred miles, and—to the sorrow of ambitious rivermen—it was long ago learned that too much faith should not be put in the navigability of the stream.

Possibly a superfluity of names has interfered with the navigation of the smaller river. The Ojibways called it "The River of the Green Leaf;" it may be that the reference was to the trees which grow so

luxuriantly on its attractive banks. In 1778 Jonathan Carver published a book in which he spoke of "the River St. Pierre, called by the natives, Wadapan Minesotar." In 1835, G. W. Featherstonehaugh wrote a book on a canoe voyage up the Minnay Sotar. Evidently he was groping for the name given by the Dakotas; to them *Mini* meant water, while *sota* meant gray-blue, or sky-colored. There were those who persisted in calling it the St. Peter, but a cautious man of early days suggested that the name be changed, "for," he said, "we need to save what few names in the calendar of saints not appropriated, for the brood of next-year villages; and St. Peter will be wanted to christen a rival to St. Paul."

The facetious comment will be better understood when it is recalled that the first name of the new settlement which, later, was to be a part of Minneapolis, was All Saints, and that the town across the Mississippi River from All Saints was St. Anthony!

In early days another member of the society of the Saints in the vicinity was Fort St. Anthony, the first permanent fort in the Northwest, which was built between 1822 and 1824. The military man who chose the picturesque site on the bluff at the confluence of the Minnesota and Mississippi Rivers knew what he was about. From the green bluffs where the trees grow luxuriantly, there is a wonderful view for miles of the valleys of both streams. The visitor to-day wonders that this site was not chosen first in preference to the place where Mendota now stands, across the river, a town famous as the scene of the first permanent settlement in Minnesota, and for the existence of the first stone house built in the state. There, in 1819,

Colonel Leavenworth ordered the construction of log huts for his men, in spite of the recommendation made by Lieutenant Zebulon M. Pike in 1805, when he visited the region while seeking the sources of the Mississippi, camped on Pike Island, near by, and secured from the Indians title to the land from the junction of the rivers to the Falls of St. Anthony. Possibly the fort's saintly name would have persisted but for the visit, in 1824, of General Winfield Scott Hancock, who suggested that it be called Fort Snelling, in honor of its builder. In 1825 the change was ordered by the War Department. For many years the Fort Snelling Reservation was much larger than it is to-day, but in 1852 much of the land was thrown open to settlers. On the remainder troops are still quartered.

Visitors are interested in this up-to-date barracks, but even more in the old Round Tower, where the pioneers took refuge from the Indians, and the block-house high above the Minnesota River. Then they pass eagerly to the fascinating series of ravines that lead through the bluffs to the river, and linger on the stream more than two miles north, which was once known as Brown's Creek, with Brown's Falls as its most notable feature.

Brown's Falls have won world-wide fame, but not under that name. How could fame come to Brown's Falls? In 1846 a traveller spoke of "a very pretty cascade," but gave it no name. The genius of Longfellow lifted the falls out of their obscurity by singing of their gleaming, glancing, plunging waters. He called them Minnehaha, Laughing Water, and so helped to bring lasting fame to Minneapolis, within whose limits they

MINNEHAHA FALLS, MINNEAPOLIS, MINNESOTA
Photographed at High Water; Ordinarily Only a Thin Veil of Water Goes Over the Precipice

SCENE IN LESTER PARK, DULUTH, MINNESOTA
See Page 54

MINNESOTA WHEAT

drop fifty-four feet over the sandstone cliff that is screened by the foliage of overhanging trees.

Those who stand before the Laughing Water do not find it easy to decide whether the fall is more beautiful at a time of low water in Lake Minnetonka, the source of the creek, twelve miles away, for then the water comes down like a fairy film, a fascinating bridal veil; or when the melting snows fill the creek so full that over the brink the stream tumbles in generous sheets that hide completely the precipice and fill with boiling foam the pool below.

Let the water be high, or let it be low, there is joy that cannot be told in standing

> "Where the Falls of Minnehaha
> Flash and gleam among the oak trees,
> Laugh and leap into the valley,"

or in scrambling down the rocky ravine below the falls, crossing the winding stream, studying the reflections of the bending trees in the waters until they mingle with the river and join in the rush to the Mississippi and then on to the Gulf.

All along the valley of the Minnesota the people tell of the Indians of whom Longfellow sang, whose memory is anything but fragrant to the descendants of the pioneers of the fifties. At Shakopee there was an Indian village, Tintonwan, whose chief was given the hereditary name of Shakopee.

Around a bend from Shakopee Chaska smiles on the valley as it affords a glimpse into the home life of these same Indians. "Chaska" was the name given by the Sioux to a first-born child if that child was a son. Unfortunately, however, these warriors did not take much time for association with first-born sons or any other

sons, until they were old enough to go on the war path that interrupted their home life as periodically as the sandstone ledges cross the channel of the Minnesota, interrupting its flow, causing rapids in time of low water that add greatly to the beauty of the river, though they are an effective bar to navigation.

Another famous point on the Minnesota is Traverse des Sioux, some distance below the great bend where the stream shifts suddenly from southwest to northeast. This was the scene of a treaty made in 1841 with the Sioux. The treaty was not ratified by the United States Senate, but it has been thought worthy of commemoration by the Daughters of the American Revolution, who, in 1914, erected a granite boulder, marked by a brass plate, at the place where the treaty was concluded.

Along the river above Traverse des Sioux are monuments of another kind to the French explorer Pierre Charles Le Sueur, who, in the latter part of the seventeenth century, traded with the Indians about the Great Bend. Monument number one is St. Peter (St. Pierre), county seat of Nicollet County. Across the river is Le Sueur County. And hugging the bend itself is Blue Earth County, whose name recalls the romantic story of Le Sueur's dream of wealth.

The Frenchman was attracted by the blue earth in the bluff near the junction of the Blue Earth and Le Sueur Rivers, where the Indians used to go to gather pigment. "Surely, this is copper!" he decided. So he took samples to France, had it analyzed, and received from the king an order to mine the copper.

In 1700, therefore, he returned to America with thirty men. Landing at Biloxi, in what is now

Mississippi, the adventurers ascended the Mississippi River in a sailing boat, a rowing vessel and two canoes.

Near the bluff where he thought the copper was, he built Fort L'Huiller, naming it for the king's assayer who had encouraged him after examining his specimens of blue earth. Late in 1701 he floated down the Minnesota and the Mississippi to Biloxi, taking with him two tons of the treasure. In April, 1702, he sailed for France, and that is the last heard of his copper.

The tradition of the hidden wealth persisted. In 1835, G. W. Featherstonehaugh made his canoe voyage up the "Minnay Sotar" for the sole object of finding the mine. After careful search he decided that Le Sueur was a liar.

At the mouth of the Blue Earth River, or the Mahkahto, as the Sioux called it, is Mankato, the town whose location is as pleasing as the name given to it because of its position at the upper end of what Nicollet—who must have been something of a poet—called the Undine Region, since the river and its tributaries made him think of Fouqué's romance of the water sprite. According to the tale, the heroine was the niece of the Mankato, a great brook in the midst of forests, beloved by the surrounding streams.

A few of the charms of the Undine Region have been set apart in the Minneopa State Park, four miles west of Mankato. The feature of the park is the twin falls in Minneopa Creek, which descends sixty feet, sending their waters into a leafy gorge that stretches away toward the river.

The picturesque southeastward sweep of the Minnesota tells eloquently of the Indian, the trapper,

the lumberman and the pioneer for whom the stream was a welcome highway. Sometimes the Indians were friendly; at Sleepy Eye, south of the river, is a monument which may be seen by passengers on the railway, erected to "Ish-tak-ha-ba, Sleepy Eye, Always a Friend of the Whites," and at Ridgely and New Ulm, stones tell of battles in the Indian War waged when the Sioux decided that the exodus of soldiers to fight in the Civil War was their opportunity to drive out the whites. This war, which was not fully concluded until 1866, was one of the most destructive Indian conflicts in the country's history.

New Ulm is noted as one of the few places in the world where red jasper is mined. Minnesota was so proud of the stone that she decided to make of jasper, the state's block in the Washington Monument. There is another jasper quarry in Rock County, down in the southwest corner of the state, a county remarkable because it is one of the few counties in Minnesota without a lake. But the most famous mines are in Pipestone County. There, for centuries, the Indians have gathered stone for their pipes. A tract a mile square has been set apart as an Indian reservation, that the red men may have liberty to cut their favorite stone, of which calumets have been made for tribesmen as far away as Georgia. On this reservation no white man may trespass.

In 1766 Jonathan Carver told of the quarries in this region. He spoke of it as a wall of stone twenty-five or thirty feet high, running nearly north and south, facing the west, having a front nearly two miles long, and disappearing under the prairie at both ends.

Pipestone Creek, which flows past the famous quarry, widens in a series of four small lakes. Close to one of these lakes the waters fall eighteen feet over a ledge. Near the Falls of Winnawissa, Leaping Rock rears its head close to the edge of the bluff. But more than scenic value attaches to Inscription Rock, also near the stream, for on this may still be seen the names of J. N. Nicollet and five of his associates, explorers all, who visited the pipestone quarry in 1838.

When Longfellow began his "Song of Hiawatha," he could think of nothing more picturesque than this region on the Coteau des Prairies—for he spoke of Gitche Manito descending—

> "On the mountain of the Prairie,
> On the great Red Pipe-stone Quarry."

When on their way to the pipestone quarries from the north, many of the Indians paused at the gorge of the Redwood River, which enters the Minnesota beyond Redwood Falls, dropping 140 feet in the last three miles, either by vertical falls or by rapids. Below the falls the river flows through a gorge where the surroundings are rugged and alluring. A portion of the gorge, as well as the tributary gorge of Ramsey Creek, with its waterfall nearly fifty feet high, is included in Ramsey State Park, named in honor of Grover Alexander Ramsey, who negotiated the treaties with the Sioux in 1851 which opened to settlement the prairies of Southwestern Minnesota, including the Coteau des Prairies, or the Highlands of the Prairies, a large district extending into South Dakota, separated from lower land by a contour line where the elevation is about fifteen hundred feet above the sea.

In Lincoln County the Coteau is notable because of channels once excavated by rivers in what was the terminal moraine of the great ice-sheets that covered the basin of the Minnesota River. One of these valleys may be seen in all its grandeur by the passengers on the railroad between Verdi and Lake Benton. The Sioux called the gap "The Hole in the Mountain." On either side are great bluffs from a hundred and fifty to two hundred feet high, that ascend nearly two thousand feet above the sea.

Lake Benton, which is close to the gap, seeks an outlet through the Redwood River, a stream that has along its course many things to cause wonder and delight, even before it comes to the falls and the gorge already noted. But picturesque stretches of water are characteristic of the neighborhood; a few miles up the Minnesota from the mouth of the Redwood the river rushes over a bed of boulders, falling five feet within a third of a mile, in what are known as Patterson's Rapids, which have a mightier neighbor a few miles up stream. At Granite Falls, falls and rapids caused by boulders account for a drop of thirty-eight feet.

The man who named Montevideo, the county-seat town above Granite Falls, had his eyes open to the attraction of the country. After looking out for a season from the heights on the valley of the Minnesota, and on the tributary valley of the Chippewa, which enters to the northwest, he decided that no name would suit but that given to the capital of Uruguay by earlier lovers of nature. The pioneer who thus gave the fitting name to Montevideo was only following the example of the Sioux, when they called the smaller river Chippewa (wonderful bluffs).

Still more bluffs enclose the expansion of the Minnesota known as Lac qui Parle. It is claimed by some that the Indians gave this name to the lake because of the echo that handed back words from the bluffs; so it became "the Lake that Talks." An early settler in the region gave a variation of the story; he said that the rising and falling of the water level during the winter permitted the ice on the lake to grate on the boulders in the bed and on the shore, and that the sounds made in this way echoed and re-echoed from the high bluffs.

Some distance farther on is Big Stone Lake, the body of water that makes the lower part of the odd extension of Minnesota into South Dakota. This crooked lake, twenty-six miles long, is from one mile to one mile and a half wide. Close to the point where the river emerges from it, are the quarries that gave the name to both county and lake. All Minnesota draws supplies from these quarries; in Minneapolis the city hall and the county court house were built of rock obtained there, while four of the columns in the rotunda of the beautiful capitol building at St. Paul come from the same source.

The Indian name of the lake was more unusual, but it, too, was given because of the stones near at hand; the native Americans called it Inyan tanyin-yanyan, "Very Great Stone Lake."

Big Stone Lake, together with Traverse Lake, its neighbor to the north, which forms the other side of the gash cut by Minnesota in South Dakota's eastern boundary, has an interesting history. These lakes were once the outlet of the prehistoric Lake Agassiz, which covered 110,000 square miles of country in Minnesota,

North Dakota and Manitoba. Thus it was greater in area than all the Great Lakes.

There is a connection between the lakes—Brown's Valley, an ancient water-course which is more than one hundred feet deep, over a mile wide and five miles long. This is the lowest point on the watershed dividing the drainage of Hudson Bay and the Mississippi.

In the days of the Indians, in time of extremely high water, Big Stone Lake received the waters of Lake Traverse, which also flowed to the north into the Bois des Sioux River. The Ojibways therefore gave a name to Lake Traverse that described the double flow, an unpronounceable name, difficult to spell and so difficult to remember that the traveller in the region prefers to think of its modern name, for which the French are responsible, given to describe the position of the lake, transverse to Big Stone Lake.

During low water Traverse's upper section is largely marsh, with a channel winding through it. Islands in the southern section and bluffs surrounding the water add to the picturesqueness of the country.

Bois des Sioux River also has a descriptive name; strips of forest border the stream for five miles or more, to the vicinity of Breckenridge, where the Bois des Sioux and the Otter Tail unite to form the Red River of the North.

The bed of the old Lake Agassiz is the famous Red River Valley, perhaps fifty miles broad and three hundred miles long. The levelling done by the glaciers that ground across the country and the depositing of the silt in the bed of the lake have made the fertile lands which have been called by some "the granary of the world;" by others, "Minnesota's Bread Basket," be-

cause it is one of the most productive wheat-growing districts known. A glorious prospect of prosperous farms is spread out from one of the old beach lines. In the rainy season there may be more moisture than land apparent, for then the water stands in sheets on the level prairie.

Once it was possible to descend the Red River by boat, but to-day the journey along the stream whose waters are a brownish-red from the mud of the old lake, can be made by rail, in the track of the dog trains and the distinctive Red River carts that were so long used to transport the Hudson's Bay Company's supplies from St. Paul to Fort Garry, near the present site of Winnipeg.

From the Red River the Roseau River leads eastward toward the Lake of the Woods. The first part of its course is in Canada. But the greater part of its length is in Minnesota, within a few miles of the international boundary. Thus it may be counted as a part of the water boundaries of the North Star State. To the Ojibways this was "the place-of-rushes river." They found it a convenient link in the water passage from Red River to Lake Superior.

The reeds which led to the Indian description of Roseau River grow most luxuriantly to the southeast, on the shores of Red Lake; there they are frequently from eight to twelve feet high.

Red Lake, the largest of the "ten thousand" lakes of Minnesota, has a shore line of more than one hundred miles. It was named by the Indians because of the sunset reflection in the water of the bright red sky.

Red Lake is part of Beltrami County's wealth of water. But the larger part is in the north, where the

Lake of the Woods, with its islands and its winding streams, is bisected by the weird international boundary line that looks as if it was drawn for the very purpose of including in the United States an inconsequential, almost valueless bit of swampy land that is, except Alaska, the most northerly part of the country. Bounded on the south, east and north by water, it is possible to approach it, by land, only through Canada!

Everywhere the Lake of the Woods has its enticements. The forests on the shore which are responsible for the name, the wide reaches of deep water, the marshy reedy inlets, and the numerous islands, some of them odd in shape or yet more odd in name, supply infinite variety for the man in a canoe who follows in the wake of the trappers and the missionaries of long ago, all of whom had their adventures with the Indians. Yet few had as trying an experience as that of the son of Verandrye, founder of Fort St. Charles on Northwest Angle Inlet, who, with Father Aulneau and nineteen French voyageurs, was killed on Massacre Island, when on the way to Mackinac for supplies. This was in 1736, nearly sixty years before the date of the treaty that was responsible for the playful jog of the boundary across the lake.

This jog was due to lack of knowledge. Men thought that the Mississippi rose far north of its true source, and this belief caused the provision that the boundary should pass from the northwest inlet of the Lake of the Woods due west to the source of the Mississippi. Eighty years more passed before the line was finally fixed, as it is marked to-day.

Even yet the line from Rainy Lake to Lake Superior is not defined so definitely as to show with positiveness

whether certain islands belong to Canada or the United States.

But the placing of an imaginary line does not trouble the voyagers, whether on business or pleasure bent, who navigate the tortuous channel of Rainy River as far as International Falls, where there is a great power development far from the centres of population; or as, from the Falls, they thread the succession of lakes and connecting streams or pack their canoes across the portages where at night tents are pitched over beds of boughs.

The final stage in the journey of water is the Pigeon River, named for the departed passenger pigeons which once frequented Minnesota in countless thousands. Canyons and falls and cascades crowd thick upon one another during the last miles before the river enters the lake. There are Partridge Falls, called "the Minnehaha of the Boundary," and the falls in Split Rock Canyon, where the river descends one hundred and forty-four feet in a distance of four hundred yards, through a narrow gorge formed by perpendicular walls of rock, rising from forty to one hundred and twenty feet in height. Finally come Pigeon Falls, seventy feet high, two miles from the lake.

The long southwestward journey by the shore of Lake Superior to Duluth and the head of the lakes is varied in the extreme. Islands, Indian reservations, a national forest, cascades of tributary streams, highlands back from the shore, whose serrated crests have given them the name of Sawteeth Mountains, combine to make the moving pictures on the margin of Longfellow's "Gitche Gumee, the Big Sea Water."

And tributary lakes are ever whispering to the traveller along the shore to go back into the interior and learn of canoe routes that wind back into the mysterious beyond.

If the call of the interior is resisted, Duluth, "the Zenith City of the Unsalted Seas," soon greets the wayfarer, who stands amazed at the lusty city only two generations old which commands the head of the lake, receives tribute from the rich Iron Ranges and sends out their product on a vast fleet of lake steamers, loaded in record time at the ore docks that are among the wonders of the world. The harbor, enclosed by Minnesota Point and its twin Wisconsin Point, reaching out from the Wisconsin shore, receives more shipping than many a famous ocean port. And the parks and boulevards of the city that has time for pleasure as well as business! Only those can realize the glory of these possessions of Duluth who have seen the pine woods, the rock gorges and the falls of the Lester River in Lester Park; who have wandered through Chester Park, where birches mingle with the pines along the edge of the creek gorge with its perpendicular rock walls; who have viewed the parks and the city from the peak in Central Park; who have followed the winding boulevards, the culmination of them being the Rogers Boulevard which leads for twelve miles along the ancient beach of prehistoric Lake Duluth, nearly five hundred feet above Lake Superior. It is easy to understand why one visitor who had a right to make the comparison said that it excelled any like road in the world.

Below Duluth the St. Louis River enters the lake after a series of falls and rapids extending for many

LONG LAKE, NEAR ELY, MINNESOTA

IN AN OPEN IRON MINE, MESABI RANGE, MINNESOTA

miles. The choicest of these falls are included in Jay Cooke State Park, named for the man whose estate, in 1915, gave two thousand acres bordering the river for ten miles where it descends nearly four hundred feet in all.

Below Lake Superior there is, for variety, a section of the boundary of Minnesota that does not follow any stream though it crosses a number of these. But not many miles are passed until once more there is a water boundary. The St. Croix River comes in from Wisconsin, and Minnesota clings to its crooked bank until it merges its waters in those of the Mississippi. The course is marked by many islands and rapids, but the most notable section is about Taylor's Falls, where, in 1895, Minnesota set aside the State Park of the Dalles of the St. Croix. Wisconsin joined in the dedication of adjacent territory on the east side of the river. The Interstate Park includes the rock gorge where the river flows through a chasm whose walls are rock cliffs from seventy-five to one hundred and fifty feet high.

The river expands during the last twenty miles into Lake St. Croix, which the Ojibways called "Gigo-Shugunot, Floating Fish Lake," because of the catfish bar, which from the east shore reaches into the middle of the expanse.

The stillness of the water in the lake was in the mind of the settlers who suggested the name Stillwater for what was to become the county seat. And the still waters reach on down until they are swallowed by the Mississippi, which soon, in its turn, expands into smiling, jewel-like Lake Pepin.

CHAPTER III

AMID THE MINNESOTA IRON RANGES

MINNESOTA is remarkable for more than rivers and lakes and waterfalls, for rich farming land and for great forests. The state has also what seems an almost inexhaustible supply of the best iron ore—great ranges of ore, ore near the surface, ore far down in the earth, ore amid the hills, ore where the country is flat and uninteresting.

But why Iron Ranges? Why not speak of the iron districts? In Minnesota there is usually a good reason for a name, even if the reason is somewhat whimsical, as, for instance, in the case of Temperance River, which flows into Lake Superior from one of the Iron Range counties. At its mouth there is no sand bar, such as many of the Lake Superior rivers have. Having no bar, it is surely a temperance river, is it not?

But the reason for the use of the word range is more matter of fact. As explained by the United States Geological Survey: "It probably resulted from the fact that in the first districts developed the rocks associated with the ore are hard and form ridges or low ranges. From those districts the term has been carried to the other deposits of iron ore in the region, until now they are all known as ranges, even if the surface is flat and swampy."

The existence of ore in the ranges amid the lakes of Northern Minnesota was known to the Sioux. They shared the knowledge with some of the early explorers who in their journals spoke of the iron. Little attention

was paid to their statements, however; of what use could the iron be when it was at such an impossible distance from civilization?

Yet there were far-seeing men who did not hesitate to declare that the day was coming when iron would play a large part in the fortunes of the territory. At length, in 1878, the state geologist gave assurance that there was iron suited for steel production close to the shores of Vermilion Lake, in St. Louis County, which claims Duluth for its own. Yet six years more passed before the formation of the Minnesota Iron Company and the building of the first railway from Duluth to the iron country which began the development of the Vermilion Range. The first year more than sixty thousand tons of ore were shipped. In four years this increased to half a million tons. Another four years saw the doubling of this output, and a little later it was doubled once more.

But the Vermilion Range was not to have things all its own way. In November, 1890, iron ore was found at a point near Virginia, which was destined to become one of the great mining towns of the state. There the Mountain Iron Mine was opened. In August, 1891, one of the explorers of the company operating the mine discovered rich iron ore clinging to the roots of a fallen tree. On the spot the great Biwabik Mine was begun, and the Mesabi Range had arrived. Biwabik is an Ojibway word, meaning iron, while Mesabi means "Great Mountain."

The Mesabi Range is about twenty miles south of the Vermilion Range, but it extends farther west. Like the Vermilion Range, it is among the hills, some of

them the highest in the the state, more than two thousand feet above the sea.

The development of the Mesabi Range was rapid. The 4,245 tons shipped in 1892 became nearly three million tons three years later, while in 1897 the production was 27,500,000 tons, nearly three million tons of it from a single mine. And it is calculated that one billion and a half tons are yet to be mined.

The discovery of the Hibbing ore beds founded the town of that name in St. Louis County. The Mahoning Mine, one mile west of Hibbing, is said to be working the largest single body of iron ore ever discovered. Here, as all over the Mesabi Range, the iron is mined from open cuttings, while in the Vermilion Range it is necessary to go deep into the earth. Some will find a visit to the deeper mines more picturesque, but the observer must marvel at the spectacle presented by the Mahoning Mine—an opening more than half a mile long, nearly as wide, and several hundred feet deep. At such open pits it is said that sixty per cent. iron ore has been mined and loaded on the cars at a cost of less than five cents a ton!

But the most marvellous story of the three wonderful Iron Ranges of Minnesota belongs to the latest discovery, the Cuyuna Range, in Crow Wing and Aitkin Counties, not among the hills, as are the other ranges, but in comparatively level country where there is little even of rock outcropping. The tale of the discoverers, Cuyler Adams and his dog Una, is sufficiently vivid to atone for the quiet country of the range they found.

Yes, *they*: for Cuyler Adams said that Una had as much to do as he with the uncovering of the iron, and therefore insisted that the range must bear the dog's

name as well as his own. He has had his way: it will be noted that Cuyuna is made up of the first-half of Adams' given name, and all of the dog's name.

Adams believed in the existence of the iron long before he saw it. For five years he talked of the presence of the deposit, but no one would believe him. Those who knew him made fun of him.

His suspicions were first aroused when he was wandering over the hard-wood forests of Minnesota. His only companion was Una, and his only guide on sunny days was a solar compass. When dark days came he had to depend on the magnetic compass. One dark day his attention was attracted by the strange capers cut by the magnetic compass; it insisted on dipping to the east and west instead of pointing merely to the north and south.

"Only one thing can be responsible," Adams thought. "There must be magnetic ore or magnetic rock in the neighborhood, and where there is magnetic rock there is probably iron either above or below."

But how was he to prove the existence of iron where there were no outcroppings? He decided to make use of the dip needle. "Then he began his ten years' uphill pull," one wrote who told the story of his pluck. "Most any man can stick to a certainty; all Adams had to stick to was a chance, but he stuck. In a year or so, he had located his hypothetical range in a rough sort of way, and had spent odd hours trying to get hold of some of the laws of the dip needle. He planted pieces of railway iron in the ground and took readings at various heights and angles; took readings in the woods from tree tops, and middle branches, and from all sorts of angles on the ground, and finally between guess and

calculation got at something that satisfied him as a working approximate of a law between the distance from the object of attraction and the amount of dip in the needle."

Having done all he could on the ground he went to New York. There "he spent a year in the Astor library studying up what had been written about iron deposits and the action of the magnetic needle. The best works were in Swedish; he couldn't read Swedish, but the works were necessary to the exploring of his iron range, and he had them translated."

At the end of the year he was back in Minnesota. "Every day saw him out tramping the woods, in and out, back and forth. He took readings every twenty-five feet across the range, the whole length and breadth of it."

Having satisfied himself, he proceeded to interest others; but here he had a second hard task. "Iron in that flat sand drift! Even the credulous public had sense enough to hoot at such an idea as that. Adams went up to Duluth and laid his theory before the iron men there; they shook their heads, called him mad, and went on their way, rejoicing that they were wise."

But before long some believed in him enough to advance the funds for a test boring. At a depth of one hundred and sixty-four feet the iron was discovered; the drill passed through the deposit some three hundred feet before boring was discontinued. Then the coming of the railroad was all that was needed to bring the ore from this great deposit to the iron mills of Cleveland and Pittsburgh and Birmingham.

The discovery was made in 1895. The first shipments were from 1910 to 1912. By 1915 more than a

million tons had been sent to market, and since that time the development has been even more rapid.

A visit to Duluth, the port that handles the immense output of the Vermilion, the Mesabi, and the Cuyuna Iron Ranges, should be supplemented by a journey by at least one of the iron railroads to one of the Iron Ranges in the region east of the Mississippi and west of Lake Superior. The better way is to go to the Mesabi and either the Vermilion or the Cuyuna, that the picture of Minnesota ore production may be completed.

The easiest trip is by the Duluth, Missabe (the railroad prefers this spelling) and Northern Railway or the Duluth and Iron Range Railroad to the heart of the Mesabi Range, which is about one hundred miles long and from a mile to three miles wide.

At Hibbing, on the former line, is the famous Hull-Rust open pit, the largest iron mine in the world. From Hibbing to Eveleth an electric road makes easy detailed study of the richest portion of Minnesota.

And only a short distance northeast of Eveleth is some of the finest canoeing country in Minnesota. There progress is easy from one to another of the apparently endless chain of lakes which offer unlimited opportunities for boating and camping, fishing and hunting.

And automobile roads! From Ely as a centre these lead off to lakes and rivers of unbounded delight.

But who wants an automobile even on the best of roads when it is possible to follow such routes as those to Kawishiwi Water and Isabella River, to Burntside Lake and White Iron Lake, to Fall Lake and Bass Lake, to a score of other lakes and rivers where are islands

and cascades, towering trees and trees which the beaver has felled for his dam, boulders in the stream and glacier-polished rock cliffs by the shore. Forget for a season Iron Ranges, business, and social engagements, programs of any sort—everything but the joy of the open air and the keen zest of tracing the waterways of the North, into the heart of the Minnesota National Forest.

CHAPTER IV

ALONG MINNESOTA'S MISSISSIPPI

"UPPER Mississippi, Province of Quebec!" So, in 1774, a man might have addressed a letter, to what is now Minnesota—that is, if he had known anyone to write to, and if there had been any way to carry his message. For in that year the Province of Quebec was extended to the Mississippi River—on paper!

When the United States finally gained title to the land about the sources of the Mississippi, geographers began to talk of expeditions into those fastnesses of the Indian. But not until 1832 did the first man find his way to the headwaters. Then Henry R. Schoolcraft succeeded in reaching the *Hauteurs des Terres,* the height of land in Northern Minnesota which separates the waters that flow to Hudson Bay from those that turn to Lake Superior and the Atlantic and others that go to the Gulf of Mexico.

Wishing to name the lake that gives birth to the Mississippi, the explorer asked Rev. W. T. Boutwell, a missionary among the Indians, who was a member of the party, for a word in Greek or Latin that would express "true head" or "source." Mr. Boutwell said he could not do that, but could give two words: "veritas" (truth) and "caput" (head).

"I have it," the explorer said. "The name is I-tas-ca!"

He had simply taken the second and third syllables of the one word and the first syllable of the other, and

had coined a name that, by many, has been accepted as a true Indian word. In fact, a collection of Indian Folk Lore, "Eastman's Aboriginal Portfolio," told a marvellous story of the Indian origin of the name. In the story, Itasca, daughter of Manabazlio, Spirit God of the Chippewas, was beloved by Chebiabo, keeper of the souls of the dead. She refused to go with him to his abode, but he was about to take her without her leave. The interference of the Storm Spirits was too late to save him. During a struggle among the gods, Itasca was buried under the hill of sand and rocks. Flowing from the sand and rocks are rills that make a lake. The rills are fed by the tears of Itasca, as she weeps for her home and friends.

Later visitors have used reams of paper and loads of ingenuity in the attempt to prove that Lake Itasca is not the source, but rather other lake-pools that lie to the south. But Itasca has been so long accepted as the birthplace of the river—the cradle of a Hercules, to adapt the words of Nicollet—that it would seem a thankless task to change the statement.

To Itasca many went on pilgrimage. They delighted in the forest-bound lake with its beaver dams and its tributary streams. They found pleasure in studying the outlet, where the infant Mississippi is perhaps twenty feet wide and two feet deep. And some of them talked of the desirability of making the country about the lake a Minnesota State Park. In 1891 final steps were taken looking to setting apart the necessary lands. Of the 19,701 acres originally included in it, the United States gave 5,956 acres, and the Northern Pacific Railroad Company gave 4,452 acres. To-day

LAKE ITASCA, MINNESOTA

DEER IN ITASCA STATE PARK, MINNESOTA

there are nearly thirty thousand acres in the reservation, and it is about seven miles square.

The whole enclosure has been made a game refuge, not only of native animals, but of others, like the forty-five elk which have been brought from the neighborhood of Yellowstone Park.

There are scores of small lakes in the park, as well as fascinating trails which wind here and there in the forest. Buildings are provided for the accommodation of those who seek these wilds when on vacation. They have only to go to Park Rapids on the railroad, then drive twenty miles on a road that is not of the best, and they find themselves where Schoolcraft made his way nearly a century ago at cost of great toil.

For the man or woman who is not afraid of enduring a few inconveniences, when seeking a summer vacation, there are few opportunities like those afforded by a canoe voyage from Itasca to the other lakes that are threaded on the young Mississippi like beads upon a chain. At any rate there will be no monotony in such a trip through pine lands, remnants of forests once vast; portaging around obstacles, or riding rapids; exploring the shores of the lakes where grows the wild rice that the Indians used to gather, threshing it into their canoes from the dense stalks; or entering the Minnesota National Forest about Lake Winnibagashish, through which the Mississippi flows before beginning its reluctant journey toward the Gulf of Mexico. For hundreds of miles it has maintained a course toward the northeast, but at length it begins to fulfil its destiny.

The names of some of these lakes that help to make the Father of Waters may be peculiar, but they have

their delightful part in the pleasure of the tour of the headwaters. For instance, there is Lake Bemidji in Beltrami County, named for an Indian chief, who had his home near the south end. Cass Lake might have borne the name Colcaspi; Schoolcraft tried to fasten that atrocity upon it in honor of Schoolcraft, Cass and Pike. Lake Winnibagashish was named by the Ojibways because of its miserable, wretched, dirty water. The irregular Pokegama Lake, which is very close to the Mississippi, is "the water which juts off from another water."

Many obstructions to navigation—like Little Falls, where Zebulon M. Pike's party spent the winter of 1805-6—have been overcome by dams, but it is still possible to appreciate the thrills of which early travellers wrote in telling of a journey down the last two hundred miles to St. Paul in eight hours.

The great water-power development at Little Falls is utilized for many mills, some of them lumber mills that give a hint of the great industry that once took the lead in these regions. For here was the margin of the great evergreen forests that reached away toward Duluth. The traveller can see a few scattered pine trees as he goes on his way, but they look like mourners for the days of forest grandeur.

The character of the scenery along the Mississippi changes at Sauk Rapids, where the Sauk River enters the Father of Waters. From this point, rocky banks frequently become prominent, as far down as Rock Island, three hundred and fifty miles from St. Paul.

It is difficult to realize that St. Cloud, the attractive town just below the rapids, is so young that in 1858 a party of Ojibway Indians, then on the war path, en-

camped on a part of the present campus of the State Normal School, and there had their war dance!

Most of the way from St. Cloud to Minneapolis the Mississippi flows through a comparatively level plain, though sometimes the hills that bound the valley come close to the river. So there is nowhere anything like the approach to the rugged gorge that reaches from Minneapolis to Fort Snelling. This gorge—like the gorge of the Niagara River—has been made by the recession of falls. Once—perhaps twelve thousand years ago—the Falls of St. Anthony were close to the bluff from which to-day the white buildings of Fort Snelling look down on the ravine. In that day there were no Minnehaha Falls; Minnehaha Creek emptied into the Mississippi like any other quiet stream. But when the falls in the Mississippi receded beyond the mouth of the creek, leaving the level of the river far below Minnehaha Creek, the tributary waters began the plunge over the precipice which has been continued for thousands of years, though the location of this plunge in the creek has been changing century after century, since in the creek also a gorge was cut by the receding waterfall.

At last, when the falls in the Mississippi had retreated close to the present site, Hennepin saw them. This was in 1680. He said they were fifty or sixty feet high. In 1766, when Jonathan Carver found them, he said the descent of the water was thirty feet. And when Zebulon Pike paused there in 1805, he said, the height was sixteen feet. Perhaps the difference in the figures was due in part, at least, to the recession of the falls. Now, however, their position has been fixed by the building of the apron that has soothed the alarm of

the pioneers who feared that the cataract would run away from their improvements. Incidentally, the falls have been robbed of their beauty. But what wonders they are performing for the mills that depend on them for power!

The first sawmill at the falls was built in 1821. Two years later a flour mill was followed, parent of the mammoth mills that have brought fame to Minneapolis. The town of St. Anthony Falls was not laid out until 1847, but by 1854 it was described by a visitor as "a picturesquely situated town—a cheerful, pretty place, clean and well-built, containing about twenty-five hundred inhabitants."

Even then it was noted that there was "a curious rivalry" between the settlement at St. Paul, ten miles down the river. A citizen of St. Paul who wrote a book about the same time, said that St. Anthony was "a right smart village." Then he added:

"St. Anthony is said to contain about fifteen hundred inhabitants, but what they do for a living, beyond the few engaged in lumbering, we are unable to say. In our opinion, the ultimate hope of the town for a large population rests upon that class of retired people of substance, as well as invalids and people of fashion, desiring literary privileges in a retired, beautiful town... Whatever we could do to attract the attention of the world to such advantages as St. Anthony really does possess, we have cheerfully done."

Then this complimentary man paid his respects to All Saints, the town that was just beginning to make a place for itself on the west side of the river, opposite St. Anthony Falls:

"All Saints, or Hennepin, or Minnehaha (what a pity they cannot find a name for the place!) is in all respects as pleasantly situated as St. Anthony, for mill purposes, and will soon be a flourishing village."

The two "villages" thus described by a man who tried to be loyal to his own town were united in 1872. The new town might have been called Albion or Brooklyn or Lowell, but the suggestion that the name be Minneapolis—the city of Minnehaha—was adopted, one letter being dropped for the sake of euphony.

Twenty years later Minneapolis was a marvel of industry, progressiveness and charm. Its setting by the river and among the lakes was strikingly beautiful. The island close to the business centre, the heights which the University of Minnesota had improved, the parks and boulevards, the shaded streets and avenues seemed all that could be asked. But in 1909 the Civic Commission began to plan for the improvement of the city on a stupendous scale. It was the feeling that the population would be a million in 1940, and that preparations should be made for the increase. In fact, the plans made took into account a city of two million people. Daniel H. Burnham, who acted as adviser of the Commission—without pay, as was his custom in city planning—inspired the members by his vision.

The vision of beauty-lovers has won for Minneapolis what its citizens proudly speak of as "the greatest water-park system in the world." It is not difficult to agree with that boast after a tour of the "Grand Round." Think of the route: first the River Road East, then the River Road West, across the river, then Minnehaha Park, then Minnehaha Parkway, Lake Nokomis Park, the boulevard around Lake Harriet,

Lyndale Park, Linden Hills, and, finally, the boulevard around Lake Calhoun!

Then the drives to Lake Minnetonka, Minneapolis' own lake of winding shores and many bays and peninsulas, are another tremendous proof of the wisdom of the citizen who, in 1883, when destruction threatened many of the city's beauty spots, appealed to his townsmen to look forward for a century when, though there would be wealth enough to purchase all that money could buy, not all this wealth could purchase a lost opportunity or restore natural features of grandeur and beauty.

The people of St. Paul—nominally ten miles down the Mississippi, though the two cities really come together—have been characterized by like reverence for the beautiful. And they have so much of it at their very door. The visitor who walks on Daytons Bluff, far above the river, or stands on Wabasha Street Bridge, will not marvel at the preference of the Indians for this site. Some of them had their villages within the present city limits, while others made regular pilgrimages to a cave where, in 1766, Jonathan Carver beheld their burial services of which he wrote so minutely. The location of the cave was uncertain until 1914. It used to be a favorite diversion of St. Paul boys to wander about the bluffs, poking into every recess, and imagining that they had found the place where Carver is said to have secured, by treaty, hundreds of square miles along the Mississippi River.

The first American citizens to locate at St. Paul were evicted squatters from the Fort Snelling reservation. One of them, known as Pig's Eye because of a physical infirmity, sold liquor at Pig's Eye Lake and Marsh.

THE MILLING DISTRICT, MINNEAPOLIS

IN BUSY ST. PAUL

But the city of the future was fortunate enough to escape the name that might have clung to it. In 1841 a log chapel was dedicated to St. Paul, and the village about it became known as St. Paul's Landing. In 1849 a regular line of steamers plied between the Landing and points down the river. One of the spring boats brought word of the birth of Minnesota Territory, which then had 4,780 population.

Five years later a traveller spoke of St. Paul as perhaps the best specimen to be found in the state of a town still in its infancy with a great destiny before it.

In the early days of the city the man who, as already noted in this chapter, spoke so disparagingly of the rival towns about the Falls of St. Anthony, declared that here was the natural capital of the territory "from Lac qui Parle to the Missouri, from the Missouri to the Red River of the North, from the Red River to Lake Superior, and from Lake Superior to the Mississippi."

An early example of the foresight and activity of the citizens was shown in 1857, when St. Peter tried to capture the Capitol, which had been located in St. Paul. The bill calling for removal failed because the chairman of the committee to which it had been referred was kept hidden in a hotel until the time for action had passed!

The early attempt to keep the Capitol in the city on the bluffs was thoroughly justified in 1896, when the glorious new state house was built on a height perhaps two hundred feet above the Mississippi. There a startling vision of hills and lakes and rivers is unfolded. And the Capitol is worthy of its noble setting. The stately structure is marvellous without, and it is yet more marvellous within; there are its heroic allegorical

statues, the Minnesota granite columns, the rotunda with its mural paintings, the Senate Chamber and its decorations, and the stairways with their inscriptions.

But St. Paul has more than a Capitol on the heights. There are Indian mounds where Daytons Bluff is highest; there is Lake Como, with the tiny Cozy Lake near by; there are glens entering the river here and there; there is Fountain Cave, where a brook, after passing through the cavern, escapes like a fountain; there are the Seven Corners, close to the business centre, where streets radiate in bewildering manner.

Then there is the wonderful river, Minnesota's own river. Soon it is to be the gift of the state to the nation. A royal gift!

CHAPTER V

IN THE LAND OF THE DAKOTAS

"YOU can look farther and see less in Dakota than in any other state of the Union!"

The traveller who made the rather sweeping statement would have been a good companion for the man in the smoker of a Pullman on a North Dakota railroad, who said, "How little timber there is and how stunted it looks."

That traveller was from Washington, where the pines are stupendous. He looked with pity at his neighbor from barren Missoula, in Montana, who exexclaimed, "How green and beautiful is everything here!"

In the Dakotas, as elsewhere, everything depends on the point of view. The traveller who looks for great forests and towering mountains will be disappointed, at least until he finds himself in a comparatively small section of these two states—which it is natural to think of together, as they were one until they came into the Union. But the man who wants to see lands of wonderful fertility and grain fields whose growing crops threaten to compel the farmer to build larger barns, can find what he seeks almost anywhere in the two states.

There is fascination in the Dakota landscape. It is attractive in the springtime, when the first green displaces the winter snows. It appeals even more when the golden grain falls before the harvester. The appeal does not depart in the fall, even when the fields are

dry and dusty, or in the winter when the ground is covered with its mantle of white.

Yet the Dakotas are part of the territory which, even as late as 1866, George Catlin spoke of as a great plain of grass, "which is, and ever must be, useless to cultivating man." And a historian has told how "pious Americans thanked God, in the days of Andrew Jackson, that He in His wisdom had placed this unusable barrier along the western boundary of the Missouri, to prevent the United States from straggling loose-jointed across the continent." Yet in less than two generations, in the valley of the Red River, there have been built beautiful cities like Grand Forks, whose $200,000 court house is a good neighbor to the $100,000 county building at Hillsboro, in the next county to the south; and Fargo, where shady residence streets of a bustling community lead on to the highways that are the arteries for the near-by bonanza farms.

To the northwest are the fruitful lands of the lake region, where a single body of water, Devils Lake, is more than fifty miles long. That lake has been given a special interest for residents of the state as well as for visitors by the creation of Sully's Hill National Park, a game preserve set apart for the protection of buffalo, elk, and deer. Its location, fifteen miles from the town of Devils Lake on the Theodore Roosevelt National Highway from Portland, Maine, to Portland, Oregon; the provision made for parking the automobiles of travellers; the forests and lake and winding roads, make this area especially attractive to the tourist.

Farther south are the undulating lands of the valley of the Sheyenne and the James, while far beyond them on the banks of the Missouri is Bismarck, the city where

the annual range in temperature is frequently one hundred and forty degrees.

Everywhere the grain elevators rise in ungainly fashion beside the tracks. A single county boasts sixty-seven of these all-important links in the chain that takes the grain to the consumer and returns the gold to the husbandman.

Across the river begin the Bad Lands—regions named because the Indians found travel difficult there. Explorers and other pioneers were glad to retain the name for regions that put a damper on their enthusiasm. But the best of the Bad Lands, the most colorful, where erosion has made weird forms that look like bits of the Grand Canyon set down promiscuously on the plain, is near the western border of the state. There, on Sullys Creek, is Pyramid Park, where petrified remnants of great trees are neighbors to buttes like the majestic "Prow of the Battleship," and towers and pinnacles without number. Beds of lignite from four to thirty feet thick throw black ribbons across the bluffs. Some of these bluffs have been made red by the burning of the lignite during past ages.

Theodore Roosevelt made these Bad Lands famous. In 1883, when he went West in search of health, he bought an interest in Elkhorn Ranch at Medora, on the Little Missouri. There he was called Four Eyes, at first in ridicule. Later the nickname became a title of respect, for he won the liking of the rough men of the plains by deeds of common-sense like his action when a volatile French marquis challenged him to fight a duel. He could not afford to refuse to fight, and he was unwilling to take part in a duel. So he accepted the challenge in terms that he knew the hot-headed marquis

would not accept: he said he would fight with rifles, at twelve paces! Of course the conditions were not accepted.

The modern visitor to the country where Roosevelt spent two active years, after gazing with wonder at the varied forms that look like a landscape in convulsions, is ready to go down the canyon of the Little Missouri toward the southwestern corner of the state, where there is actually a bit of land thirty-five hundred feet high, or northeast to Verandrye National Monument, where, near Sanish on the Missouri River, is Crowhigh Butte, from which the explorer Verandrye looked to the land across the stream.

The tale of North Dakota is repeated in South Dakota. Great prairies stretch away to north and south and east and west. Cattle feed by the streams, and bring riches to those who send them to market through the stock pens that are in many places a feature of the landscape as prominent as the elevators. Prosperous towns and cities are on the banks of rivers and on the plains of a state that is much larger than all New England.

The thoughts of those who dwell in these cities and towns are turning at vacation time toward a wonderland in the southwestern part of the state that is as yet comparatively unknown to most of the people of the country, in spite of the fact that Roosevelt delighted to tell of its glories. This wonderland is the Black Hills region, a district only one hundred miles from north to south and about sixty to eighty miles from east to west. "Where the East meets the West," this country has been characterized. There, in a district not larger than Connecticut, are peaks and turrets and mountain

COWBOYS AT THE BASE OF PICKETT BUTTE, NEAR THE MALTESE CROSS, SOUTH DAKOTA

THE LITTLE MISSOURI, ABOVE ELKHORN RANCH, SOUTH DAKOTA

meadows; gorges, waterfalls, and rushing streams; crystal caverns and colorful rocks; castle-like dikes and extinct geysers. And everywhere are the pines whose dark green foliage led the Indians first to name the hills Black (Pacha Sapa).

It seems absurd to speak of this wonderful region as a country of hills. There are mountains there—mountains of granite that lift their haughty heads five, six, seven thousand feet above the sea; mountains of glory from whose summits it is possible to see clearly objects in four states; tremendous mountains that overtop anything between the Rocky Mountains and the Himalayas. South Dakota has been too modest in telling of them. How lavishly they would be exploited if they belonged to some other portion of the country!

The Black Hills are orphans; they belong to no other mountain system. They are uplifted suddenly in the heart of the plain. To quote the words spoken to the author by Dr. O'Harra, President of the South Dakota State School of Mines, who has explored every majestic square mile: "It is as if, under a soft layer of cake, a man should push up his fist, raising the crust, and breaking through here and there with thumb and knuckles."

They are not orderly, for there is no distinct range; they are a geological hurly-burly, with granites and limestones, slates and quartzites, sandstones and porphyries apparently in confusion—confusion out of which the geologist brings order, in which he finds perennial pleasure.

The fascinating story of the man from whom the rocks have no secrets begins with a sea where sediments from the land were deposited. Then came the

cutting of the sediments by eruptions, and the intrusion of granite. Next the gold-bearing quartz was formed. The sea became shallow and the land rose so that the rocks were abraded and shaped. Once more the land subsided, and the sea was supreme. The second shallowing of the waters was followed by disturbances that lifted entire regions far above the sea. Streams cut gorges in the rocks, and other changes took place, including the secreting of rich bodies of gold ore whose discovery long years afterward brought pioneers to the region. Their arrival caused sorrow to the Indians, who felt that the country was too beautiful for mere man. On their hunting trips the savages would enter with reverence, remain in fear, and leave with relief. The reluctance of their final departure is told graphically in the story of the Sioux war of 1876, in which General Custer and his gallant command were cut off. At the end of that conflict was the treaty by which the wonderland passed to the United States, so that it could be thrown open to gold-hungry miners and pioneers eager for land even amid the rocks. But the spirit of the aboriginal hunters hovers over it still. The names of scores of rivers and waterfalls, mountains and springs and valleys tell in wild music of the free life of these lovers of nature and give zest to the wanderings of the fortunate one who lingers in the recesses of the Black Hills Forest or the Harney Forest, whose supervisors have made accessible numberless beauty spots.

Roughly, the shape of the Black Hills is that of an oyster. Around the outer edge there is a comparatively low range of hills, quite regular in contour and arrangement, except at the northwest. Then comes an

oddity: a valley, comparatively level, that runs like a ribbon parallel to the outer rim of hills, separating them from the Black Hills proper. This valley is frequently two miles wide and is known as The Race Track, though it is called by the geologist, The Red Valley, because of the color of the formations there. An almost continuous stretch of verdure, it seems like the parent of the mountain meadows that are scattered at intervals among the granite and the limestone.

Four trans-continental highways—the Black and Yellow Trail, the Yellowstone Trail, the South Dakota Scenic Highway, and the Custer Battlefield Highway—give easy access to the Black Hills from Chicago or Minneapolis. But a trail through this land that makes the pulses leap and causes the man or woman from the city or the plains to feel like singing in rapture, is good only because it shows the way to the by-roads leading up to the heart of mysteries that are infinitely more glorious than words can tell. An accurate guide to the roads and trails may be found in the maps of the two National Forests which will be sent on application to the Supervisors, whose headquarters are at Deadwood and at Custer.

Perhaps the best place to begin the tour of the Black Hills is at Deadwood, the supply city for the gold-bearing country of which it is the centre. The route to Deadwood leads along the Race Track, then plunges into the heart of the hills. Both railroads and highways give so many hints of grandeur and variety that the traveller should be prepared for the sight reserved for him when he reaches the city of the gold rush of 1876. But he isn't!

Perhaps he looks for a decayed mining town; yet there is nothing decayed or out of date about Deadwood. Possibly he expects to see reminders of the days when this was the site of one of the worst of the bad camps of the frontiers. He will discover nothing but well paved streets, handsome business buildings, pleasing homes—in fact, a city whose four thousand people might give pointers to many a community four times the size. Naturally he will be told where was "the dead line" on the main street, which dissolute characters did not dare to cross. And he will be taken to the monument of "Preacher Smith," erected on the commanding site where he was killed by the Indians when on the way to fill a preaching engagement, as well as to the graves of Wild Bill and Calamity Jane.

But when he climbs above the resting place of these two notorious characters of the days of the camp's badness, he will forget everything but the beauty. Far from the White Rocks, which look down on the complex valleys eight hundred feet below, where Deadwood has her seat, he can trace the gulches where the pioneers toiled for gold, now crowded with buildings. He is too far away to note the forbidding waters of the creeks which carry the waste from some of the gold-extracting plants. But he will marvel at the ingenuity of the house builders who have made terraces of the steep hillsides, and gardens in the rear of the houses, conveniently placed so that it is possible to step into them from a second story balcony—that is, the first square rod of them; the second square rod is on a second terrace, on a level with what would be the third story, if a third story there were. Flights of steps seemingly endless rise boldly from the streets to some of the front

gates. In places streets are so steep that stairs have taken their place, and there is no passage except for those on foot.

In most localities "No Thoroughfare" would be the sign on some of those streets. But in Deadwood men and women learn to drive an automobile in most impossible places. On one narrow street the author's vehicle encountered the flivver of a fish peddler. "I'll back for you," he said. He did back—up the steep hillside, until he turned a beautiful somersault. Anxiously two men lifted the car from the peddler, who came up smiling and soon proceeded to drive down into the town.

From Deadwood's 4,500-foot level the eyes that gaze from the White Rocks are lifted across the valley to the towering Mount Theodore Roosevelt, crowned by the monument erected to the memory of the great President by the Society of Black Hills Pioneers. Access to this monument is by way of the winding road built by the Forest Service, which is so easy that the climber has appetite unimpaired for the stirring panorama from the height.

Colonel Seth Bullock, who led in the building of the Roosevelt Monument, is buried several hundred feet below the White Rocks; his grave looks across the valley to the memorial of the friend whom he met in 1884 while hunting for cattle that had strayed north from his ranch at Belle Fourche. Roosevelt was on the lookout for cattle which had wandered south. The men forgot their beasts, for each realized that he was in the presence of a leader of his fellows.

Belle Fourche, far to the north, is within the line of vision from White Rocks. The waters held back by the

great dam of the Belle Fourche reclamation project sparkle in the sun that joins with them in making 100,000 acres wonderfully productive. Beyond lies the Bearlodge Range of Wyoming, where the Devil's Tower is situated; on the right are the hazy Short Pine Hills and the Cave Hills of North Dakota. The eye is held by Deers Ears and by Two Top, a height by which Roosevelt used to ride when on the way from his Elkhorn Ranch to Deadwood.

The man on the lookout has only to turn to the left if he would have a far more rugged prospect. Far up the gulch he has a glimpse of Lead, the town named because there the miners of 1876, who had been forced to be content with more or less satisfactory gold prospects, discovered the lead where they uncovered the greatest riches of the Black Hills.

The route to Lead is circuitous and most picturesque. A railroad overcomes, by zigzags, compound curves, and various other engineering expedients, the five hundred and fifty feet of elevation between Deadwood and its neighbor. An electric line climbs more abruptly up another gulch. Both rides should be taken, and then the distance should be made by automobile or on foot.

A visit to Lead is an event. The six thousand residents of the thoroughly modern little city depend for their living on the Homestake Mine, the greatest producer of low grade gold ore in the world. From six shafts, the deepest of which penetrates into the earth nearly half a mile, and from a gigantic open cut, more than two hundred million dollars' worth of gold has been taken out in less than forty years. Since much of the ore produces but four dollars of precious metal to

the ton, a mountain of rock has been exhausted to produce gold that would measure less than ten feet cubed!

Of course the visitor will be eager to go down in the mine. But he cannot get permission. He must be content to wander through the surface plants, and to be fascinated by the hundreds of thousand-pound hammers or stamps that crush the quartz until it can be washed down a sloping steel table where mercury, attracting the particles of gold, retains it as amalgam while the useless particles of rock waste go no one cares where.

From time to time there is a clean-up of the amalgam—usually authorized, but sometimes, in spite of the greatest vigilance, conducted in secret by pirates like the man from Denver who, during the author's visit, was apprehended with a quantity of amalgam in his clothes. "Nobody knows where he got it," a loquacious lawyer volunteered. "He has been coming here for eleven years, and for eleven years he has been selling amalgam at Denver. Everybody thought he got it from a mine of his own. But now we know that he must have had a private tunnel beneath one of the amalgam tables. Think of the gold he has been grabbing!"

Probably much of the stolen gold came from quartz secured in the open cut at Lead which looks like a mountain turned inside out. The mountain is taking its revenge: the sides are slipping in, like a great Culebra Cut. Houses and even great business buildings near the edge have been abandoned. But the profit of extracting gold is so great that the cost of rebuilding is not worth the calculation of the nabobs who, from a total investment of $200,000, now have a property valued at $25,000,000!

The man who said that the Black Hills were the "richest hundred miles square in the world," was thinking of the minerals to be found everywhere. The bare list of these fills nearly two pages in a handbook on the region issued by the President of the Rapid City School of Mines. The list begins with altaite, and includes asbestos, beryl, bismuth, calcite, chalcopyrite, cinnabar, copper, corundum, dolomite, feldspar, fluorite, galena, garnet, graphite, gypsum, hornblende, heterosite, iron, kehoite, magnetite, mica, noselite, opal, pyrite, agate, amethyst, chalcedony, jasper, rock crystal, selenite, spodumene, sylvanite, and vanadinite. Then the catalogue concludes with willemite, zircon, and zoisite! The native rattles off these names, and seems surprised when the visitor asks for an explanation.

"Over there is a spodumene mine!" the author's guide said one day. It was possible then to pretend knowledge, to promise an early and surreptitious study of geology, or to own ignorance. But the easiest way was to ask, "And what is spodumene?"

Scattered here and there through the canyon and along the cliffs are various mines devoted to gathering and exploiting strangely named minerals or to unusual processes for extracting others that are better known. Unfortunately many of these mines found it impossible to continue work because difficult labor conditions after the Great War made them unprofitable. Yet the vacated buildings add picturesqueness to the landscape. Here and there a deserted village about an old mine or former lumbering operation impresses the fact that it is impossible to live without work even in these splendidly beautiful surroundings. In one such village many houses have been torn down and carried

away piecemeal, to be erected by some city dweller who has been fortunate enough to secure one of the charming sites for summer homes set apart by the Forest Service on the banks of streams, under the shadow of protecting cliffs, or far up some canyon where only trout seem to share the secret of the locality.

Those who penetrate to the sites of these homes think that the region has a better claim to its reputation for riches than that given by the possession of minerals. What is the wealth of precious stones compared to the lavish display of boundless beauty? Who can remember sordid gold while he is taking the thrilling ride from Deadwood to Portland, where the road rises nearly two thousand feet, or from Portland to Spearfish, with an average drop per mile of more than one hundred feet for twenty-five miles? At times the line clings precariously high upon a cliff, with the valley far below.

And such a valley! It is the valley of the Spearfish, where the cathedral spruces are dark against the light green of the aspens, whose diminutive leaves flirt with every passing breeze; where the road flits in and out enticingly amid the luxuriant verdure; where the stream dimples among the rocks, flings itself over little precipices, expands into still pools where the trout lurk after dashing madly—maddeningly, in the thought of the fisherman—through the shallows; where, here and there, the industrious beaver build their ingenious dams that add to the problem of the United States Foresters by flooding the roads.

"You can see a beaver if you are patient!" they say in the valley. The author was patient, but long he looked in vain. Then, as he crossed the stream, one of the busy animals flashed down, a bundle of leaves in his

mouth, and was in sight for several rods until he darted into his hole in the bank. It is fine to see a beaver at the Zoo. But what a thrill comes from watching him in his native waters!

On Little Spearfish the beaver have given added beauty to marvellous Roughlock Falls, for they have blocked the channel until the waters find the lower level at half a dozen places. Here they cascade over successive rocks; there they glide at once over a precipice; again they filter through the verdure that blankets the place of the descent.

These falls of wonder are but a few rods from the road, but they seem to be in the midst of primeval solitude. The traveller has been put on his guard, and he expects something. But the reality is far beyond his expectations. The vision is written indelibly in the memory of one who stands for a few minutes where he can look up at the successive fairy-like leaps of Roughlock, and then turns his head until he can drink in the wonder of the canyon walls that gather round him like an amphitheatre. It is not a little canyon, and the walls are far from diminutive: they are massive, stupendous, even when compared to the scenery of Colorado.

It is perhaps three-quarters of a mile to the farther wall of the amphitheatre. Nestled by the creek, almost within the shadow of rocks that reflect the setting sun or are shrouded in mist in the early morning, is a rustic hotel where fishermen and hunters, and seekers after prosaic leisure, are, by rare women hostesses, welcomed to the wild, to breakfasts of delicious trout and to dinners of the tenderest fried chicken.

From Savoy, the post office of this delectable hostelry, the road winds down the canyon to Cheyenne

Crossing, a spot famous in the days of the stagecoach, past campers who call out "Supper's ready!" to the stranger who knows he is welcome to stop and share the fare of the forest; within hearing of scores of birds that sing with abandon, notably the meadow lark, whose varied and liquid calls inspire the rivalry of other songsters; on down to Ice Box Canyon and Deer Mountain, White Tail Creek and Sugar Loaf Mountain, and so many other scenes of pleasure that the tale of the day is full to overflowing.

But there are other days, and other canyons. For instance, the canyon of Elk Creek, close to Crystal Cave, that wondrous series of underground passages and rooms, miles long, from which formations were taken for the Crystal Cave display at the World's Fair at Chicago. It is better to see the crystals in their native situation, to clamber over the boulders that make the passages delightfully difficult, to hold the dripping candle along the eerie track of a geyser of long ago, and decide what a treat it would be to explore all the recesses of the subterranean marvel.

Better even than the cavern is the trip across the pine meadow to the precipice where, suddenly, the canyon comes into view. Another amphitheatre is there—broad, spacious, shouting silently the story of Creation. It is in reality a double amphitheatre, for within the encircling cliffs there crosses a beetling limestone precipice, craggy, spindling, broken, superb, abruptly ending in a sharp projection for all the world like the Flatiron Building in New York City. Along the base of the limestone formation Elk Creek picks its way, making the quick turn about the Knife Blade Rock that was followed by the engineers who built the first rail-

road in the Black Hills, for which iron was carried overland from Pierre, by ox team. The railroad has been abandoned, and a mountain road uses the right of way. The view from that right of way was famous in the days of the railroad, but it is not to be compared to the view from the vantage rocks that jut out from the meadow on the cliff.

One such canyon would satisfy most communities. But the Black Hills country hardly has time to count its natural features of this kind, so prodigally have they been bestowed. The admirable map of the Black Hills Forest sets these down. Some of them, like Loveland Canyon, are noted with distinction. Others are mere gulches, but in many cases the scenery is so exquisite that Gulch ought to be spelled in capital letters.

One of the most famous of the canyons leads out from Rapid City, "Gateway City of the Hills," which snuggles placidly among the uplands bordering on its seven tributary valleys. Rapid Canyon stretches away in miles of wonder to the southwest of the prosperous town of seven thousand people. A little railroad winds in and out by the water and between the cliffs, as far as Mystic, in the heart of the hills. The thirty-five-mile journey is a bewildering succession of curves and bridges, of frowning walls and precipices that seem to block the way, of spruce trees that rise in airy spires and more spruce trees whose branches, instead of seeking the upper air, widen out for contrast.

Automobiles cannot travel the rough way of the canyon, but this fact does not deter the fisherman who has learned to hunt for the trout waters. It is not a difficult hunt, for how the trout bite in Rapid Creek! "It was wonderful sport!" a dweller on the Dakota

prairie said, after spending a week far up among the frowning walls. "It will give me something to think about all the coming year."

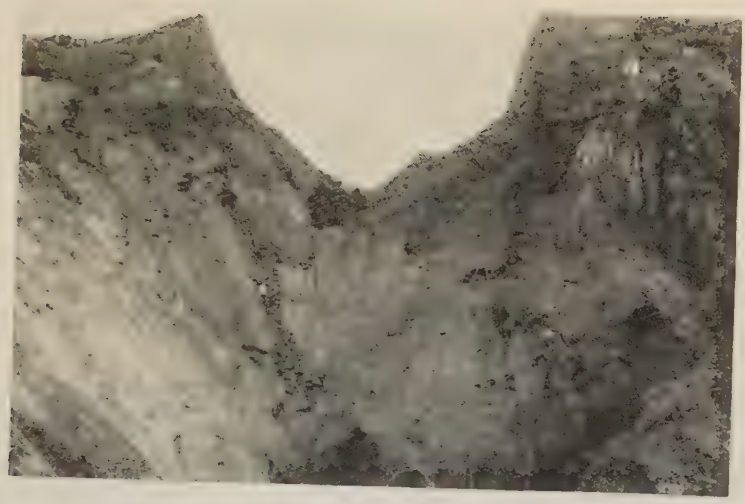
Not far south of Mystic those who wander from Rapid Canyon stumble on a lumbering operation conducted in coöperation with the Forest Service, which shows well the careful methods of fostering the pine trees while marketing a product that can be taken without detriment to the forest. A logging camp is close to two great flumes, miles long, which carry the timber to the place where it can be handled easily.

Off to the northwest of the logging camp, across a maze of creeks and gulches, is Custer Peak, nearly sixty-eight hundred feet high. But the loftiest and most sublimely rugged mountain lies to the south and is approached by a road that will be famous some day because of the variety of country through which it passes and the thrills that come in climacteric succession. The engineers of the Harney Forest should have the heartfelt thanks of all who delight in nature's grandeur because of the last difficult miles of the road, perched precariously above Sunday Gulch, climbing up the shoulder of Harney Peak, hurtling around jutting crags, finally tunnelling through a massive ledge of granite that pokes its nose in the way. It is impossible to make that climb rapidly, not because the path is so difficult but because frequent long pauses must be made to look off to the valley far below, up at the precipice above, or down in the gulch where the waters roar. Everywhere are great rocks and pinnacles, balanced boulders, and crags of weird shape. And spruce trees—spruce trees above, spruce trees across the gulch, spruce trees in the depths.

Without warning the road leads to a level space amid rocks where peerless Sylvan Lake lies like a mirror, guarded by massive rocks that seem like the great palings of some giant fence. Once there was no water there, only the granite rocks on the one side and the massive cliffs on the other. But a pioneer saw the possibilities of the spot—springs in the basin that would fill a lake if only he could build a dam four or five rods long that would fence off Sunday Gulch from the valley of the stone palings. So he took out a mineral patent on the necessary lot, built his dam, watched the lake fill from the springs sixty feet below the surface, and built on the shore a resort for the traveller. The hotel is now owned by South Dakota, which, by arrangement with the United States Forest Service, has made of Sylvan Lake and surrounding forests and mountains, a reservation, known as Custer State Park, in which about one hundred thousand acres are included. This hotel is a surprise to travellers who find themselves there, 6,250 feet above the sea.

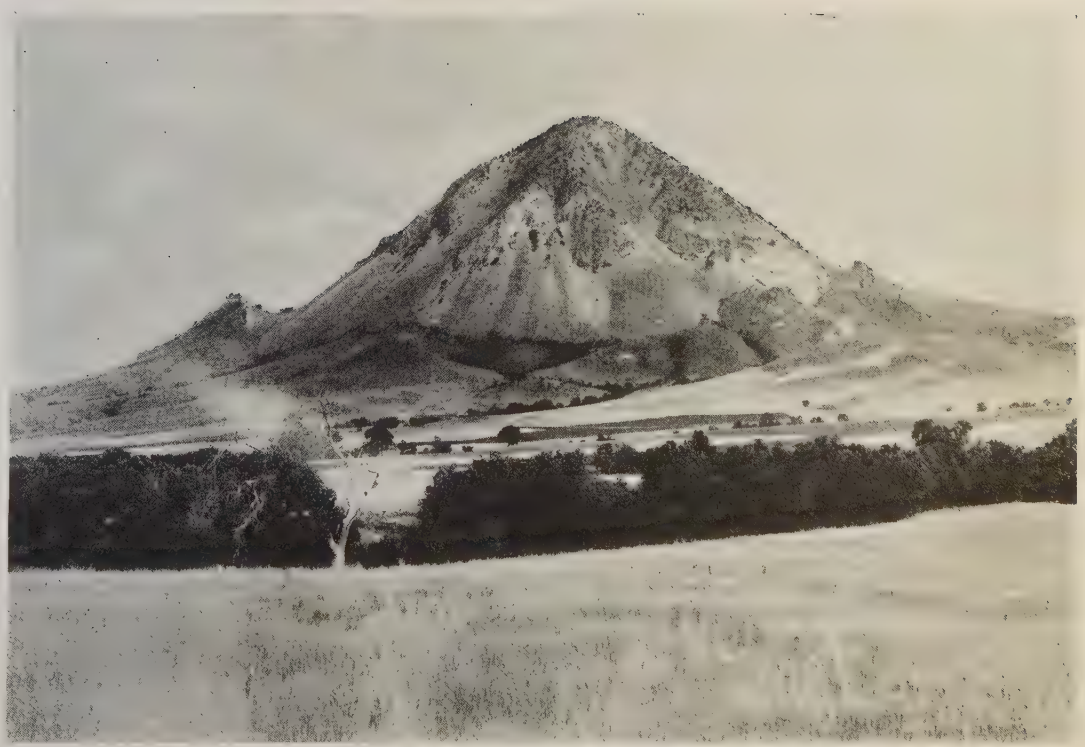
The hotel is comfortable enough to lure to rest the wayfarer. But who can rest when he can explore the wonderful cliffs about the lake, or pass through the cleft in one of these cliffs, not more than three feet wide, cut by nature's hand with as great precision as if the rock had been cheese and the knife in the hands of a grocer?

But the observer's wonder here is as nothing to his amazement as he passes down to the gorge that falls away swiftly from the lake to the gulch. On either hand, and close together, are walls of granite from four hundred to six hundred feet high. Between the walls great boulders lie heaped one on another, some large



THE OPEN CUT, LEAD GOLD MINE, SOUTH DAKOTA

THE ROCKS AT SYLVAN LAKE, NEAR THE SUMMIT OF HARNEY PEAK, SOUTH DAKOTA



BEAR BUTTE, NEAR STURGIS, SOUTH DAKOTA

as a three-story house, others mere blocks weighing a few tons. They are grouped like the playthings of some Titan, and it is a scramble to be remembered, over them, under them, coasting down them, toward the place where, framed by the spreading walls of rock, the setting sun glorifies the heavens, touching with life the cathedral spires of the spruces as they rise from amid the rocks, the mountain side beyond, the upland valley and ridge on ridge of blue mountains in the distance.

Next day the call is still up Harney Peak, to the rugged summit twelve hundred feet higher. Around the lake leads the trail, through the spruce trees, by babbling springs and brooks that call to drink. On the moist track the burros carrying supplies to the forest observer on the peak left the marks of their hoofs, not ten minutes before. And at one point the dainty footprints of a deer showed that he passed that way after the burros had disappeared. It is easy to imagine that those bushes just ahead are waving because the animal is hidden there! Wild flowers there are in profusion, some of them familiar, others with strange names. There is the loco weed, dread of the stockman, now white, now deep blue. Yellow flowers and red flowers have their turn in the kaleidoscopic carpet, among the rocks that become more rugged as the highest point is approached. The trail is easy, except the last bit, and even there a ladder has been built to make possible for all comers the path to the crest where perches the cable-bound observatory from which the keen-eyed watcher, who can see into four states, flashes the news of forest fires.

From the summit, 7,244 feet up, down to the lake, there is another trail, somewhat more difficult. But

the difficulties are nothing because of the splendor and grandeur revealed along the way. For on this trail are the famous Needles, and the Cathedral Spires, remarkable formations of granite that extend now like a palisade, again like the walls of a great amphitheatre. Hundreds of feet they rise, as if they would pierce the sky. Once they enclose a giant meadow. Here the spruce trees reach up, up as if they would compete with the rocks in their ambitious climb; but soon they resign the race to the heights. On one side of the amphitheatre the pinnacles lead to a succession of great rock walls. Those who make the exhilarating clamber to the final rock find themselves looking far over into the valley to Custer, the oldest town in the Black Hills.

On the site of Custer, General Custer encamped with his men in 1874. Later the same year gold was discovered there by Custer's Chief of Scouts. The first settlers in the hills located on French Creek, on December 23, 1874. The remains of the stockade built by them for protection against the Indians are still to be seen at a short distance from the town.

A few miles from Custer, and within the borders of the Harney National Forest, South Dakota is caring for the Custer State Park Game Sanctuary. Thirty thousand acres are included on the range for wild buffalo, elk, and antelope. Good roads, unexcelled camping sites, scenery rugged and dominating, streams where the trout rise quickly to the inviting fly, and a lodge where travellers are offered pleasing entertainment, combine to make this Reserve irresistible.

The distance is not great from the Game Park to Wind Cave National Park, while along the road, or within a short distance of it, are more of the scenic

riches of this remarkable country. The stratified cliffs and the variegated rocks, scattered pell-mell where the stream ought to be, tell an absorbing story of titanic forces of long ago.

There are scores of natural bridges in the winding passages of Wind Cave, where the geyser of ages gone by must have had wonderful sport in traversing the mazes before it burst out on the surface. To-day a draft of wind takes the place of the water. This flows in or out of the entrance according as barometric pressure changes.

It is twelve miles from Wind Cave to Hot Springs, by the Sioux called Minnekahta (hot water), the town where these Indians went for healing, and where thousands of health seekers follow their example each year. Just before reaching the Springs, the highway skirts Battle Mountain, the lofty site of the battle between the rival Cheyennes and Sioux for the possession of this country of ten thousand marvels.

There are perhaps one hundred medicinal springs in the compound valley below Battle Mountain, known as the Vale of Minnekahta. Clustering about these are hotels, sanitariums, and bath houses. Many of the attractive private resorts for invalids are located far up on the slopes above the town, and are approached by flights of wooden steps so long that the Supervisor of the Custer Forest was led to remark, "Maybe they count a patient cured when he can ascend those stairs without discomfort." They should! Visitors spend their time drinking the waters, swimming in the great plunge, which is fed by springs in the gravelly bottom and is always at a temperature of ninety-five degrees,

or wandering into some of the twisting canyons that approach the town on all sides.

With regret the Indians turned their backs on this wonderland in the southwest corner of South Dakota—regret as great as was their relief when they were able to avoid the other marvel of this region, the White River Bad Lands, where water was scarce, where travel was far from easy, where on every hand they beheld the work of evil spirits.

It is remarkable that two such widely contrasting natural features of this favored country are located so close together. From Hot Springs it is only fifty or sixty miles to the heart of the Bad Lands. In fact, the round trip can be made in an automobile in a single day, though it is better to devote two or three days to the expedition. Though the total area is only about fifty miles by twenty, extra time will be well spent. Access is not difficult, for the Custer Battlefield Highway passes through, as does the line of the Chicago, Milwaukee and St. Paul Railroad from Chamberlain to Deadwood.

These highways are close to the remarkable Great Wall, which separates the district from the fertile lands to the north. The wall—irregular, weird, fantastic—is quite precipitous on the side toward the south, though ascent to it on the north is more gradual.

That Great Wall is the sharp boundary between the everyday country and the land of a thousand nightmares. In that land phantom pinnacles are neighbor to buttes that look as if they were fashioned by nature when in a jocular mood. Erosion has played a great game in shaping the cliffs and the canyons. "Magnificent ruins of a great silent city painted in delicate

CEDAR PASS IN THE BAD LANDS, SOUTH DAKOTA

A SOUTH DAKOTA WHEAT FIELD

shades of crimson and pink and buff and green," said one who has tramped over every square mile along the Great Wall, in the tributary canyons, and up rugged Sheep Mountain, whose cedar-covered summit is the crowning feature of the country.

Bits of rare verdure are scattered here and there, for homesteaders have discovered that some of the country may be cultivated, just as cattle rangers once discovered that here in the heart of the land of silence was splendid pasturage for their flocks and herds. Up on Sheep Mountain remnants of other flocks leap from cliff to cliff; a few mountain sheep survive in a region where once they existed in great numbers.

And all this is in South Dakota, a state that, to most people, is a monotonous succession of prairie, billowing away to the horizon!

CHAPTER VI

WHERE FLOWS THE PLATTE RIVER

TO the Indians Nebraska was the country of shallow waters, but to the pathfinders and the emigrants who toiled along the more than seven hundred miles of the Platte River's erratic course from the Missouri to what is now the boundary of Wyoming, it was frequently a region of raging torrents. For there are times when the floods fill the channel, and there are seasons when the sand bars are far above the other dry sands of what was once the bottom.

For half of its length, the valley of the Platte is a garden where cattle and grain thrive, while the fields of sugar beets are successfully rivalling the plantations of the South, and that in the very region where the disappearance of the buffalo was succeeded by the solitude and desolation which caused pessimists to say unutterable things of Nebraska's future.

But there was no Nebraska then, and when, in 1854; the territory was organized, it extended from the northern border of Kansas to British America, and from the Missouri River to the Rocky Mountains. Serious attempts had been made in Congress to fix the Platte as the southern boundary, because of the difficulty of fording, ferrying or bridging successfully a stream that was sometimes a torrent and frequently all but dry.

It is noteworthy that the cities that have grown up on Nebraska's central stream have clung to the north bank as if they feared the resumption of the proposi-

tion to give to Kansas some of the fairest portion of the state.

For instance, there is Fremont, where—close to the station—is a granite monument marking this as a point on the emigrant trail to the Pacific.

Columbus is on the Loup, but so close to the north bank of the Platte that it seems to belong to that stream—Columbus, which would be the capital of the United States to-day if George Francis Train, a resident there in 1864, had been given his way; he declared that the young town was the centre of the United States, and therefore the logical place for the seat of government.

Grand Island also boasts a north-of-the-Platte location; it was called "Le Grand Isle" by Robert Stuart, employee of John Jacob Astor, who, in 1812, while on his way to Astoria, Oregon, traversed the valley of the Platte. He called attention to the island in the river forty-two miles long which extends almost from Grand Island to what is now Kearney.

Kearney, the site of the second Fort Kearney, was the meeting-place for all the travellers by the emigrant routes from various Missouri River starting points. A marker in the city is a constant reminder of those days when herds of buffalo frequently held up the traffic; as recently as 1860 they were so plentiful that it became necessary to issue a military order to soldiers not to kill the beasts on the parade ground of Fort Kearney!

North Platte seems to be an exception to the rule of locations on the north side of the river. But this city has solved her difficulty by choosing an advantageous site near the foot of the curious long peninsula formed

where the course of the North Platte and the South Platte are nearly parallel for forty miles, and quite close together, before joining to make the main river.

By this time the face of the Nebraska country has changed. It is still fertile, responding well to the skill of the irrigator. But the country grows rough; canyons and buttes and table-lands are reminders that the Rocky Mountain country is not far away. To the south are gaunt Chimney Rock, and Courthouse and Jail Rocks, in Cheyenne County, while the Wild Cat Mountains, where the rugged country about Coliseum Rock is peculiarly notable, reach higher than five thousand feet, and striking Pine Ridge eminences are nearly as high. To the east of Pine Ridge, along the White River, are fantastic formations that proclaim frankly their kinship to the Bad Lands across the line in South Dakota. Dawes County boasts many of these formations, among which pine-clad castle-like Crowe Butte is preëminent.

Most striking of all the weird eminences in Western Nebraska are Toadstool Park, in the extreme northwestern corner, Coliseum Park, more than five thousand feet high, and Scott's Bluff, which is close to the Platte —but on the south side of the stream—not far from the Wyoming border.

The story of Scott's Bluff is of absorbing interest. In 1822 General Ashley of St. Louis, with a party of a hundred men, started on a hunting and trapping expedition into the Rocky Mountains. Before the foothills were reached privations and dangers had reduced the number to forty. These forty, however, included some of the history makers of the West, among whom was Hiram Scott, a "free trapper"—he gathered hides and

PINE RIDGE AT COLISEUM ROCK, SIOUX COUNTY, NEBRASKA

TOADSTOOL PARK, SIOUX COUNTY, NEBRASKA

SCOTT'S BLUFF NATIONAL MONUMENT, MITCHELL PASS, NEBRASKA
The Track of the Californian and Oregon Emigrants may be seen in the Left Foreground

fur for Hiram and not for a fur company. Six years later, Scott and a number of his fellow pioneers, after forming the second Northwest Fur Company—the first one having been merged into the Hudson's Bay Company—were returning to St. Louis when, about six hundred miles up the Platte River, Scott became stricken with fever.

Two companions—Roi, "the man of the desert," and Bissonette, a squaw man—remained with him, the three planning to join the rest of the party at a designated bluff or mountain about a hundred miles below. Their boat was upset about twenty miles west of the point where Fort Laramie now stands. Provisions, powder and guns were lost, but the men reached the shore safely.

At this point Scott was deserted by his companions. He crawled over hills, sagebrush and gullies for about a hundred miles, dying at the foot of the bluff where he expected to rejoin his party, and which now bears his name.

Scenically, Scott's Bluff is worthy of national notice and preservation. Each summer hundreds of tourists make the difficult ascent to the top and, from its elevation of 4,662 feet, look down on six towns nestled in the North Platte Valley, and many miles of irrigated acres of green alfalfa, golden grain, and other crops. This promontory and the hills adjoining are the highest known points in Nebraska. In frontier days it was called the Gibraltar of Nebraska.

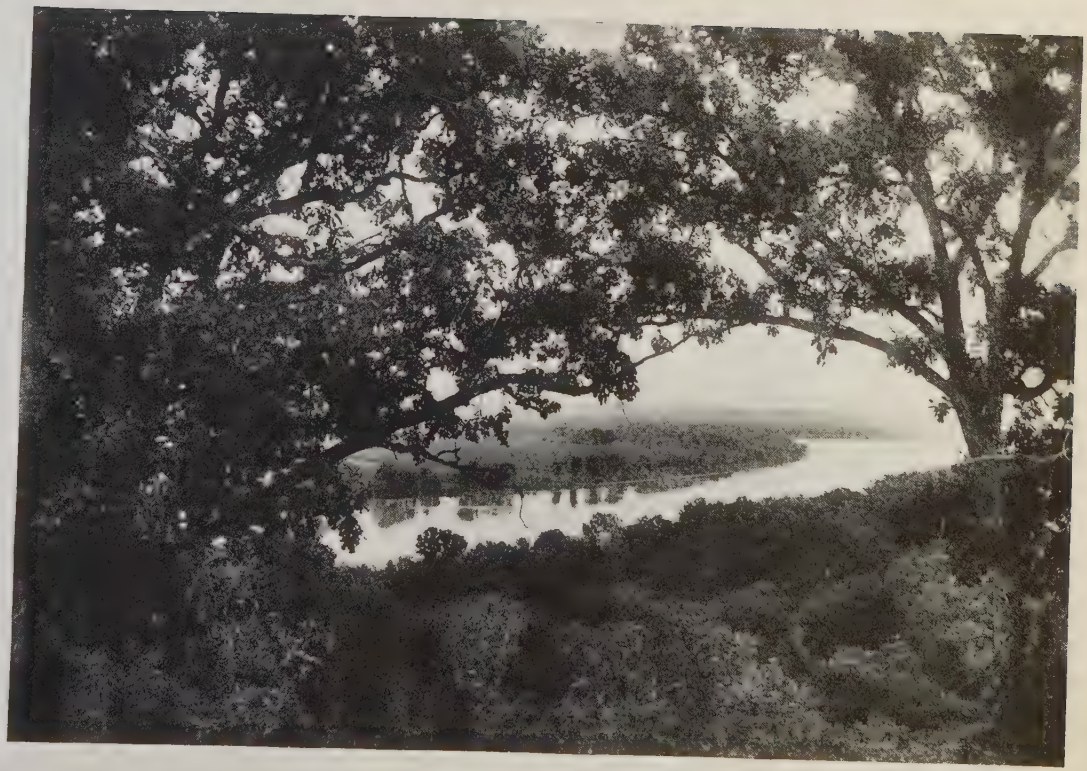
To-day Scott's Bluff is of special interest because, on December 12, 1919, President Wilson issued a proclamation setting apart 2,053 acres as a National Monument.

This is the country of fossils, where have been found the remains of camels the size of ships, strange horses, and deer that seem odd to the sportsmen of to-day—to say nothing of the horse-like chalicotheres, the night-marish syndyoceras, and the pitiful looking rhinoceros.

Even the vast country of the sand hills—twenty thousand square miles, of which Edward Everett Hale said in 1854, "It is wholly useless for agricultural purposes, and must remain so forever,"—is taking its place among the hopeful regions where something worth while can be done. Yet pessimism concerning these sand hills seemed justified, for all was a jumble of hills that would not stay put. The country was ever on the move; like the waves of a choppy sea the hills rose and fell. Sometimes bits of vegetation, clinging to the slope, succeeded in giving a semblance of permanence to the sandy formation. But let a burrowing gopher disturb the vegetation, and quickly the wind would scoop out the sand from the top of the hillock, forming a curious blow-out. All over the sand hill region these blow-outs add to the desolation.

But in 1905 a man of vision in the United States Forest Service had an inspiration: he felt sure the sand hills were capable of growing sufficient timber for the needs of this western region. So jack pine seedlings, brought from the eastern states, were thrust into the ground. They grew. The area was made a National Forest, with headquarters at Halsey, on the Middle Loup River. Plantations were started. Experiments were continued for years. And now, in the midst of the otherwise barren landscape of a cattle country, there is a real forest, with trees from twenty to thirty feet high in the oldest plantations. Climatic and other

TODD VALLEY DRIVEWAY, WAHOO, NEBRASKA



A MISSOURI RIVER VISTA, OMAHA, NEBRASKA

conditions have been modified. The change wrought cannot be indicated more graphically than by saying that to-day birds flourish where once they were altogether unknown.

The sand hill country is full of surprises. Up in Brown County, on a branch of the Niobrara River, is Longpine, one of Nebraska's pleasing resting places in the hot summer days. Just at first the traveller sees nothing especially noteworthy in this country of the cottonwoods, which, in June, throw their bunches of fluff with lavish generosity. But close to the town there is a blessed ravine—with apologies to the Black Hills, it might even be called a canyon. There cooling waters and grateful shade, deep below the surface, on a beach of green, over which the cottonwoods bend benignly, give clarion call to heat-weary ranchmen and their families.

The railroad that affords its passengers a fleeting glimpse of this Longpine oasis soon reaches, on its eastward way, the valley of the Elkhorn River, north of Nebraska's cottonwood-bordered stream. The railroad follows it most of the way to Omaha—at least until it approaches so close to the Platte that it is able to give up the fight to create a valley of its own, and is content to wander lazily from side to side of the valley of the larger river, which it joins after twenty-five miles of this parasite life.

After following the Elkhorn to the Platte, and the Platte to the Missouri, it is a temptation to follow the latter stream. This can be done by rail, though above Omaha it is necessary to take the Iowa side of the river because the current cuts the bluffs on the right bank so prodigally that the roads are forced to the left side.

On the Missouri there are many points of more than ordinary scenic beauty, and one of the most notable of these is where Omaha has its site. Bluffs and ravines and river views testify to the good taste of the founders who paused where, in 1804, Meriwether Lewis and William Clark made their camp. Fifty years after they passed up the Missouri the town was laid out, and it has not yet ceased to make capital of its surroundings. The latest plan for beautifying the city and its environs is the building of the fifteen-mile drive along the river.

Once Omaha was the capital of the territory, then of the state, and the seat of government was removed only after years of wrangling, due to the feeling, in Omaha, that its loss would doom the growing city. The story of the fight is most picturesque. It included a rump legislature which met at Florence, just above Omaha, and the charge by the Omaha papers of border ruffianism that outdid Kansas; the further charge that Omaha had failed to keep faith by refusing to deed to the commonwealth Capitol Square; attempts to boom various paper cities, as Salt Creek; the beginning of Neopolis, the Queen City of Nebraska, close to Cedar Bluffs and Fremont; and the final choice of Lincoln, which just escaped being called Central City. The homesteaders on the site selected for the new capital gave eight hundred acres to the state, and soon a free lot was offered to everyone who would build a house worth a hundred dollars.

The early settlers at the site of Lincoln had been attracted by the salt springs, and the remains of the basin they left may still be seen a few miles west of the city. However, other approaches are so beautiful that

visitors are ready to agree that the site was chosen with wisdom.

While the location of the capital brought prosperity to Lincoln, its removal did not prove the death knell to its predecessor, for those charged with finding an eastern terminus for the new Pacific railroad chose Omaha, and the fortunes of the city were made.

CHAPTER VII

IN KANSAS, "THE BATTLEGROUND OF FREEDOM"

"KANSAS?" There was no mistaking the careless tone in which the self-sufficient man began his comments on the Sunflower State. "Don't know anything about it but what I heard when I was a boy. Father owned a quarter section out in the central part of the state, and there was only one tree near the middle of the plot, with a mud hole, by courtesy called a spring, near by. So when I hear of Kansas I think of the cattle seeking shelter from the burning sun under the lone tree, and from time to time pacing dejectedly to the mud hole. Isn't that enough? So no Kansas for me!"

"And you have never taken the trouble to learn how grievously mistaken you are!" came the reply from one who heard him. "You ought to read the travel article written fifty years ago by an Eastern newspaper man. He said: 'Day after day one may travel, and still one word will characterize all he sees—Beautiful!' He added, 'Yet there is no monotony, for every mile reveals beauties in new and peculiar form.' Then there was Francis Parkman, the historian, who spoke of 'the beautiful attractions of fertile plains and groves, whose foliage was just tinged with the hues of autumn.' "

There is perhaps some excuse for the man who has not seen the smiling valleys and the vast plains of Kansas to speak disparagingly of the state. For he recalls perhaps that France, which claimed the region because of discovery by Dutisne in 1719, in 1762 ceded it

to Spain as of little account; that Spain paid little attention to it; that France, when once more its owner, bartered it for a song with the remainder of the Louisiana territory; that when it was a part of Missouri Territory it was thought of as a sandy waste, until those who travelled over the Santa Fé Trail and the California Trail discovered that it was not a part of the Great American Desert, but was a gloriously fertile land.

Finally the early history of Kansas as an independent territory added nothing to its attractions, in the minds of many. For ten years, from the passage of the Kansas-Nebraska Bill in 1854, it was a storm centre between those who advocated the extension of slavery there, and those who wanted "free soil." Squatters from Missouri and colonies from New England made rival settlements. Leavenworth, Lecompton and Atchison were strongholds of pro-slavery sentiment, while Lawrence and Topeka were bitter opponents.

But those days of border warfare, of rival legislatures, of conflicting constitutions, of armed invaders, are all forgotten, and to-day Kansas smiles a welcome to people of all beliefs from every clime.

"What do you think of our river?" is the question frequently asked of those who respond to the invitation of the Sunflower State. There are those who ask, "What river?" For Kansas has many noble streams. But when the Kansan refers to "our river," he thinks only of the Kansas River, or the Kaw, as it is called by the fortunate residents in that state. [If you wonder at the name, pronounce it Kansaw, and omit three letters, thus: K(ans)aw.] The loyal resident near

that stream swears by the Kaw, he rejoices in the Kaw, he measures all other streams by the Kaw. Note the proud boast of a loyal son of the country west of the Missouri:

"Up and down the deep and fertile Kaw valley for a distance of a hundred miles, for which Topeka is the centre and natural shipping point, there exists undeveloped wealth surpassing the gold of Colorado or the copper of Montana, since it is inexhaustible. Nowhere this side of the valley of the Nile is a richer land, whose crops are as certain and shipping facilities as ample. On both sides of the river run the main lines of great railway systems. The Kaw valley is famous for its square miles of apple seedlings, three-fourths of this business in the United States being found in this valley, and for its enormous potato fields, shipping annually six million bushels."

Even the geologist has his boast; he declares that the Kaw marked, roughly, the southern edge of the great ice sheet that covered four million square miles in North America. And he will argue that this fact has much to do with the quaint beauty of the country, where the valley is watered by a stream that falls but one hundred and fifty feet in its first sixty-eight miles, that near its mouth "meanders from side to side of a wide bottom, between high bluffs, at times keeping close to one bluff, again to the other, two or three miles apart."

On a bluff close to the spot where the Kansas mingles with the Missouri, Kansas City, Kansas, has a choice location. There the Missouri makes a great bend that helps to make beautiful the really remarkable boulevard system of the Kansas sister of Kansas City, Missouri, with which it is connected by a viaduct two miles long,

TOPEKA, KANSAS, FROM THE AIR ABOVE THE CAPITOL

from bluff to bluff. Who can forget the revealing prospect from that viaduct!

Kansas City has but one of many beautiful locations on the river. In the opinion of many the site of Fort Leavenworth, some distance up the stream, is much more notable. From its high and steep limestone bluffs the eye looks off to hills and streams and fertile valleys, a restful vision. How often soldiers and pioneers must have enjoyed this prospect in the days when Kansas was young, until the fort—which was the supply station for other forts on the Santa Fé and Oregon Trails—came to have an abiding place in memory.

Those who, instead of going up river from Kansas City, follow the Kaw to Topeka and beyond, pass through one long succession of scenes of pastoral beauty, interrupted now and then by cities and towns that speak eloquently of past history, as well as of present prosperity. Leavenworth, which rests on a gentle slope, rising from the stream, is mentioned frequently in the story of border warfare, while it has an effective place in the development of the state of to-day because of the presence of the Kansas University, whose buildings are perched on that sightly ridge, Mount Oread. A few miles beyond Lawrence is Lecompton, capital of the territory from 1855 to 1861, and stronghold of the pro-slavery faction, which has forgotten party strife in making the most of its peaceful surroundings.

Topeka, the beautiful capital city of the state, like Burlingame in the country to the south, is on one of the old trails to the West. At Topeka the Oregon Trail crossed the Kaw, while Burlingame is built on the

Santa Fé Trail; a stone, placed by the side of a well where the freighters were accustomed to drink, tells the story. From Burlingame the followers of the trail passed to Council Grove. The stories of the pioneers make many references to this place and its attractive surroundings.

Many of the pilgrims on the Trail were tempted to pause amid the pleasant prairie flowers about Council Grove, just as numbers of those who crossed the Kaw at Topeka must have cast longing eyes up that river where their successors carved homes by the stream and back on the prairies. Some of these later comers—they were from Cincinnati—founded Manhattan, where the Big Blue comes down to the Kaw from the north. A few years after their arrival a visitor said they had chosen "the most beautiful part of Kansas, which is the same as saying that it is the most beautiful portion of the earth's surface upon which my eyes ever rested."

Beyond Manhattan the Republican and the Smoky Hill Rivers unite to form the Kaw, and at the junction Fort Riley was built in 1853. A government document of the time bewailed the fact that prices had increased thirty per cent., so that seventeen thousand dollars more than the estimate would be required to complete the work!

The pastoral beauty of the country continues many miles beyond Junction City, the successor of Fort Riley. Abilene—once known as Dogtown because of the prairie dogs whose mounds were near the town—is close to the mouth of the Solomon River, which flows through a valley noted because of its fertility and pleasing character. Salina, not far from Abilene, though on the Smoky Hill River, has been famous since

the time of the driver of the ox-teams who, in the days before the railroad, said, in a matter-of-fact way, that only a month and a half was required for the trip to Denver and return.

One of Salina's near neighbors, Lindsborg, also on the Smoky Hill River, has gained fame for more than beauty of surroundings. The town was settled by music-loving Swedes, whose pastor led in the formation of the Bethany Oratorio Society. To-day, although the town has but nineteen hundred people, the society has nearly six hundred members. Its annual presentations of Handel's Messiah attract musical critics even from across the Atlantic, while American music lovers think a trip of a thousand miles or two, small price to pay to hear the Lindsborg singers. Excursion trains from surrounding towns are crowded when an oratorio is announced.

From Lindsborg it is only a pleasant cross-country jaunt down to Hutchinson, in the centre of the great Kansas wheat belt, on the Arkansas River. This was the Nepesta River of Coronado, who, in 1541, sought the mythical city of Quivira not far from the present site of Great Bend, the town which looks both ways along the mighty northeast and southwest thrust of the river whose waters help to make fertile some of the best land in Kansas.

Beyond Great Bend the face of the country changes rapidly. There are landmarks of the old days, like Pawnee Rock, ten miles southwest, whose surface bears the signatures of pioneers. To the south are desolate sand hills. To the southwest is the old cattle country, with Dodge City as its chief town, where once vast herds passed on their way from Texas to the north. In

1884, the greatest cattle year known by the town, 800,000 cattle, in charge of 3,000 men, passed through. Dodge City is also noteworthy because, until 1835, Mexico reached to a point across the Arkansas River.

Down below Dodge City, on the line of the cattle trail, is the curious Meade Salt Well which appeared in March, 1879. On March 3 there was no sign of it; but on March 26 a passer-by found a hole more than two hundred feet in diameter and twenty to thirty feet deep. The sink hole was filled with salt water, although all other water in the neighborhood is fresh.

Buffalo wallows—depressions left by the great beasts as they took muddy baths in pools of water; multitudes of sand hills; intermittent lakes; smooth treeless slopes that mount gradually to the border of Colorado, are characteristic of this southwestern part of the state, as of the country farther north.

But let no one think he may as well keep away from these regions, or pass through at night. There is no part of Kansas where the visitor who would know America can afford to be careless of his surroundings.

ST. JACOB'S WELL, KANSAS

THE MEADE SALT WELL, MEADE COUNTY, KANSAS

CHAPTER VIII

OKLAHOMA, "THE LAND OF THE RED PEOPLE"

THE loquacious traveller had been regaling his associates on the sleeping car with tales of his experiences.

"Yes," he replied to an inquiry. "I have been in every state in the Union, with one exception. I have never been in Oklahoma. But the omission does not trouble me. I've been all around that state—in Texas and Missouri and Arkansas and Kansas. It does not seem likely that I have missed anything by leaving out Oklahoma."

A loyal Oklahoman rushed to the defense of his state. "You have merely missed seeing one of the unique portions of the country," he began. "Probably you are not aware that at least eight flags have waved over the state—the flags of France, the kingdom; Spain; France, the republic; Mexico; Texas, the republic; the United States; the Confederate States; and—during a portion of the Civil War—the seven-pointed star of the Cherokee Nation, carried by Stand Watie's Indian regiment.

"Perhaps you never heard that the name now given to the state was proposed by a Choctaw Indian. He said that it should be called the land of the red people, Oklahoma; and this was the name given to the unorganized Indian country until it was appropriated by the district within the Indian Territory opened for settlement in 1889, only to be given back to the whole

in 1907, when both Oklahoma and Indian Territory were admitted as a state.

"Other states had their periods of colonization, of early struggles with pioneer conditions, of gradual growth and development; Oklahoma, on the contrary, sprang into existence in a day.

"And nowhere else in America has there been such a mixture of types from all parts of the land. The settlers came from north and from south, from east and from west, and to-day students are watching the interesting results of the mixture of diverse elements as well as the spectacle of representatives from fifty different tribes of Indians whose history tells of enforced migration from thirty states.

"Then there is the Panhandle, in the northwest corner of the state. No other part of the country can tell a story like this No Man's Land, as it was called for many years. Originally a part of Texas, it was given up when Texas was admitted to the Union because the Missouri Compromise did not allow slavery north of 36°30′. The southern boundary of Kansas was 37°, so nearly six thousand square miles of attractive land were left out of consideration by all surrounding organized territory. The Cherokee Indians laid claim to the strip, on the ground that, in 1828, the United States had presented to them a perpetual outlet west of their reservation; but in 1886 the Land Office ruled out this claim, because the land in question was not acquired from Mexico until twenty years after the agreement with the Cherokees. Cattlemen took possession, and settlers entered without authority, until, in 1887, fifteen thousand people organized what they called the Territory of Cimarron, held a legislature at Beaver,

and sent a delegate to Congress, with a request for recognition.

"This interesting history of the northwestern boundary in the vicinity of the headwaters of the North Fork of the Canadian River has its counterpart in the south, where, for many years, the Red River was a stream of contention between Oklahoma and Texas. How far did Texas extend to the north? How far did Oklahoma extend to the south? Texas said one thing, Oklahoma another. Little but sentiment was involved in the dispute, until the title to oil lands in the valley of the river, worth perhaps two hundred million dollars, depended on the decision. A Federal receiver held these lands until the United States Supreme Court decided, in 1921, that the boundary between the states follows the southern bank of Red River."

The traveller who had expressed the opinion that he could with safety ignore Oklahoma was ready to own his mistake. But the man who had opened his eyes had still more to say. He called attention to the fact that most people think of the state as a plain, though it has thousands of square miles that range from two thousand to five thousand feet in elevation. There are mountains in the northwest, there is a tableland in the central part, called the Arbuckle Mountains, while a portion of the Ozarks are within the eastern boundary. Then the Kiamichi, Brush, Poteau, and Jack Fork Mountains are neighbors of isolated peaks that may not be lofty, though they are picturesque. Finally there are the Wichita Mountains, between Fort Sill and the North Fork of the Red River, whose straggling, rugged peaks rise abruptly from a level plain. In the northeast corner, canyons, buttes and mesas mark the

passage of streams through the sandstone. Altogether, Oklahoma is anything but monotonous.

But still greater surprises await the traveller who is willing to give the state time to reveal the extent of its claim to the attention of those who desire to know the country of the red soil. They will find that zinc and lead are mined there liberally; up in Ottawa county, there is a great cave that is a vast mine of rich lead.

In the western part of the state are the Salt Plains of the Cimarron, part of 100,000 square miles of salt in an irregular body stretching from Kansas, across northwestern Texas, into New Mexico. In many places the beds of pure salt, seven hundred feet thick, lie hundreds of feet below the surface, though in woods and streams there is indication of the presence of the mineral; in places the crystals gleam in the sun like diamonds. The United States Geological Survey estimates that in this, the largest deposit of salt in the world, there are thirty thousand billion tons, or enough to supply mankind for two million years at the present rate of consumption!

Cotton adds attraction to this state of varied resources. To-day the annual product is large, yet, until 1892, no one thought of Oklahoma as probable cotton country. Then the business men of Guthrie were astonished by the tale of a committee representing negro settlers from Georgia who had secured a half section of land near the town. They said they had ventured to plant a little cotton, because the soil was so much like that of Georgia, using for the purpose a little seed that had found accidental lodgment in their goods when they moved. When they pleaded for help in securing an adequate quantity of seed, no one would

heed them, until one man, impressed by their insistence, persuaded others to send for the seed that resulted in the cotton crop of 1893.

The varied mineral riches of Oklahoma include coal and zinc, marble and granite, asphalt and iron. The successive developments of oil fields near the original discovery in 1890 have drawn thousands of people to the northeastern, the central and the southern parts of the state, and millions of dollars in wealth from the ground. Yet it has been said by one of the most successful oil men in Oklahoma that more money has been put into the ground than ever came out of it. The Glenn oil field rivals the Hog-shooter gas field in production. Wells that produce seven thousand barrels of oil daily, and others that give out six million feet of gas in the same period, are not unheard of. Sapulpa, Ardmore, Tulsa and Bartlesville are among the towns and cities that have been made by the oil fields. Stately business buildings and handsome residences, financed by the underground wealth, rise close to the forests of derricks which make treeless regions look like a forest that has been visited by fire.

While there are stretches of prairies in the state almost entirely innocent of trees, there are other localities where extensive forests flourish. There are streams bordered by luxuriant foliage and mountains on whose slopes the timber flourishes. There is even a National Forest in the beautiful country of the Wichita Mountains, where buffalo, elk, deer and wild turkey are protected. The aim of this Wichita Forest and Game Preserve is to care for game, rather than trees.

Platt National Park is another of the nation's reservations within the state, whose claims to attention are so manifold. Sulphur, in the south central portion, is the railroad point from which travellers seek this reservation of more than eight hundred acres, renowned not only for its remarkable natural beauty, but also for its medicinal and fresh water springs. The woodland scenery, the Bromide Cliff trail, the ravine, Travertine Creek, with its many falls and rapids over the rocky bed, and the Antelope and Buffalo Springs, in which the creek has its source, are lures that draw thousands of visitors.

Platt Park is also a game preserve. Buffalo and elk thrive there, deer will eat from the hand of the cautious visitor, while the mocking bird delights those who take advantage of the automobile grounds provided for tenants.

Modern travellers to Oklahoma are following in the steps of the vanguard of the Indians for whom Indian Territory had been set apart in 1834. Choctaws from Mississippi were succeeded by the Chickasaws. Followed the tragic removal of the Cherokees from Georgia and Tennessee, the settlement of Creeks and Seminoles, the formation of tribal governments in tribal capitals, like Tahlequah, Okmulgee and Tishomingo, and the cultivation of the soil by the aid of negro slaves whose possession led many of the Indians to side with the Confederacy during the Civil War, so that much of the territory of the Oklahoma of to-day was disputed ground between contending forces. The interest of those who find themselves in the modern country of the civilized tribesmen, grown wealthy through the lands allotted to them, is increased by the

recollection that for three years the Cherokees were divided in their allegiance, maintaining two tribal governments, John Ross being the head of that loyal to the United States, while Stand Watie was chief of the Confederate party; and that at the end of the war some of the Indians claimed the right to treat for peace as an independent nation which had allied itself with the Confederacy.

The close of the war brought into the Indian country another pioneer of trade, Jesse Chisholm, whose wagon wheels marked a track from Wichita, Kansas, to a point near Anadarko, south of the Canadian River. In 1867 the cattlemen from Texas began to use the Chisholm Trail in driving their herds to Kansas. During twenty years, millions of cattle took this first stage in the journey to Chicago, because the pioneer railway in the state, authorized by Congress in 1866, was built in the eastern part of the territory, far from the trail. Passengers who enter Oklahoma by the Missouri, Kansas and Texas Railway are reminded that they are travelling on the road that was first in the race of two companies from Kansas south to the Indian Territory boundary, and so won, for a time, the sole right to enter the land of the Indians, in accordance with the terms laid down by Congress.

Spreading out from the Chisholm Trail, the cattlemen saw that the country was so well suited to their purpose that they determined to oppose with all their might the opening to settlement of any part of the Indian lands. So they rejoiced when the United States troops seemed to be on their side, driving out the Oklahoma Boomers who, in 1879, tried to settle lands which railroad attorneys said were subject to home-

stead entry. Their joy continued when, during five years, eight attempts of David L. Payne to lead a company of Boomers to the coveted territory were foiled. But later on, when they realized that the coming of the homeseekers was inevitable, they encouraged the Indians to oppose both the would-be settlers and the troopers who sought to maintain order.

The final defeat of the cattlemen and Indians who wanted to keep for themselves the rich lands came in 1889, when the failure of a bill opening Oklahoma, a limited territory in the central part of the present state, led the friends of the measure to make its provisions a rider on the Indian Appropriation Bill. This cleared the way for the Proclamation by President Harrison opening the Oklahoma lands on April 22, 1889.

The vivid description of scenes at the opening, written on the spot by a reporter for the *New York Tribune,* stirs the blood. On the designated day he watched the cavalcade that started from Kansas:

"Promptly at noon the trumpeters of D Troop, Fifth Cavalry, sounded the 'dinner call.' It was the signal agreed upon for the start. Immediately there went up shouts and cheers. A hundred pistols discharging their contents into the air but faintly echoed the joy, the enthusiasm, the feeling of relief on the part of the crowd that the supreme moment had arrived at last. Away dashed the horsemen in mad gallop, lashing their horses as if life depended upon reaching the top of the hill yonder. They were followed closely by buggies, buckboards and road wagons, and the rear was brought up by the heavy drays, all lashing up that steep incline. Clouds of dust obscured the foreground.

"On the railroad track, when the signal for the start was given, stood a lot of men. They had neither wagons nor horses, but they were determined to settle in Oklahoma all the same. Shouldering their small bundles, they set out boldly on foot."

The writer entered the waiting train which was scheduled to reach at four o'clock the site of Guthrie, in the northern part of the land to be opened for settlement.

"On the way, horsemen and wagons were seen dashing across the country in every direction. Here and there a man was seen driving his stakes. This was an hour only after noon, and at least twelve miles beyond the border. How did these men get there? Perhaps they broke through the line on the right, or they were some of the old Payne Boomers, who have been hiding in the woods for a year or more."

When the train reached Guthrie five hundred people were already there. "The crowd which jumped from the train long before it stopped, and rushed madly up hill, with stakes and flags and axes, ready to locate claims, found not only corner lots but whole streets and sections of the future capital of the territory occupied." By night there were twelve thousand people in the city. There were probably fifty thousand in all in the territory. Oklahoma City, as well as Stillwater, Edmond, Norman, El Reno, and Kingfisher had enough inhabitants to become cities of the first class.

The rush of homeseekers and speculators, repeated in 1893 when the six million acres of the Cherokee Strip were released for settlement, led to so much lawlessness that, beginning in 1901, the opening of other lands purchased from the Indians was arranged by means of

a lottery. On August 6, 1901, 160,000 people registered for the 26,000 claims that were drawn for them by a blind boy.

Among the most interesting documents that tell of the earlier history of this friendly land, are the reports to the Secretary of the Interior made annually by successive governors of the territory after its admission in 1890. They tell of primitive conditions rapidly giving place to comfort and cheer. At first there were sod schoolhouses, but soon frame buildings replaced them, while the days of brick and stone came rapidly. In the report of 1898, the executive told of towns and cities springing up in a day; becoming in a week established business centres, and in a month well settled communities. Then he added, "It is only a question of the time actually needed by workmen until they have substantial buildings and paved streets and sidewalks, and a little later water works, electric lights and projected street car lines."

The report of 1894 called attention to the fact that one of the difficulties in the way of statehood with the Indian Territory was the fact that the Indian tribes had been treated as powers with whom treaties could be made, while it was clear that they were only the wards of the nation and so subject to the laws of Congress. This barrier to joint statehood was considered by the Dawes Commission, which succeeded in bringing about conditions that made joint statehood for Oklahoma and Indian Territory possible in 1907, when the population was a million and a half.

All this sounds like an impossible tale from the Arabian Nights to one who, making his first visit to Oklahoma, looks with wonder at the progressive agri-

cultural country and at the well developed cities and towns, of which there were in 1900 but seven having a population of more than twenty-five hundred, though by 1920 the number of them had increased to fifty-four.

Guthrie will always be a centre of interest for travellers, not only because of its pleasing site, but because the city was the first capital of the territory, and, later, of the state, and because there met the Convention of 1906 which succeeded in writing into the constitution "just and righteous laws which the people of older states fought in vain for years to secure."

But in 1910 the sceptre of Guthrie passed to near-by Oklahoma City, which became the seat of government after a season of turmoil marked by the removal to the new location of the great seal of the state, at night, an injunction from a state district court forbidding the transfer of state records, and the threat of the governor to arrest the officers of the court. The settlement of the dispute was followed by the erection of the stately Capitol at Oklahoma City that is the pride of the commonwealth, Guthrie included.

Oklahoma City's parks and boulevards are as remarkable as its Capitol. In 1909, with unusual forethought and determination, the city began a program of park development by constructing a boulevard twenty-eight miles long and five hundred feet wide, beautified by watercourses and parkways. This boulevard, laid out as an irregular square, connected four park areas located on the four corners.

Off to the northeast of Oklahoma City and Guthrie is Tulsa on the Arkansas, a city in the oil region which is not far behind the capital of the state in population. The city is as picturesque as the derivation of its name

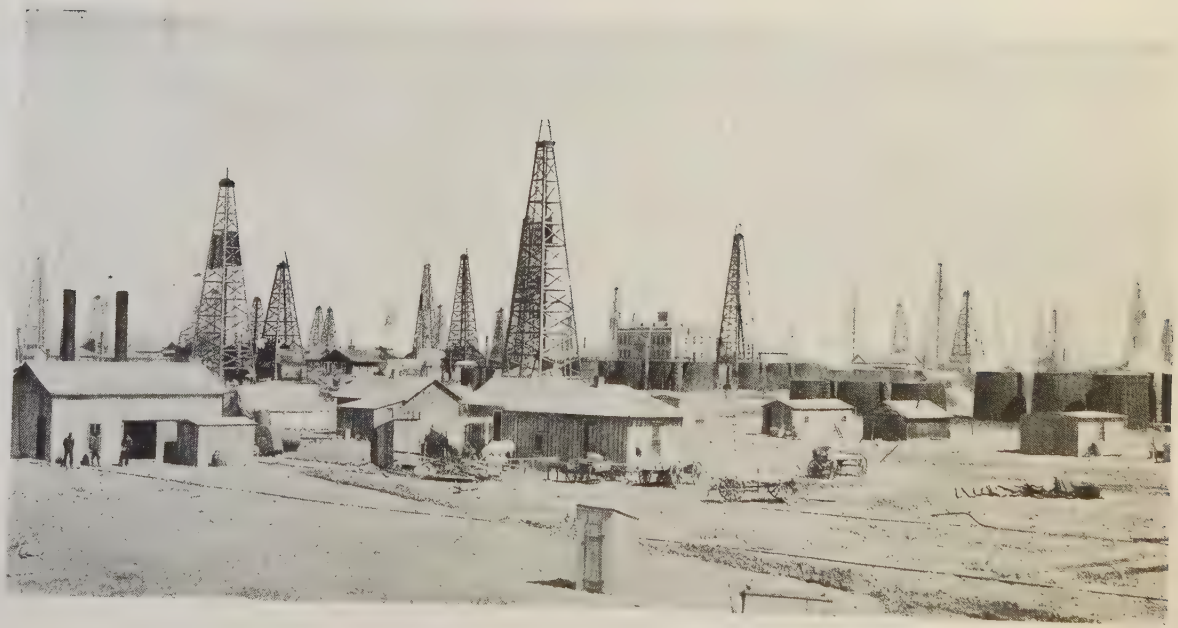
from the Creek clan, the Tulsa Lochapokas, whose chief, Archie Yahola, settled on the site in 1836, and was succeeded by Tulsa Fixico and Joe Tulsa. Its high buildings afford a wide prospect of hill and prairie, over lands underlaid with coal and oil and gas.

Muskogee, down stream from Tulsa, ranks third in the state in population, but, in the opinion of many, is first in interest both because of its surroundings and its historic associations. By the side of Oklahoma City and Guthrie it is ancient; it dates from 1872, when the railroad from the north crossed the Arkansas River and reached the near-by site. It soon became the Agency headquarters for the Creek Nation, and later the seat of action of the historic Dawes Commission, appointed for the allotment of Indian lands. Now the United States Agency for the Five Civilized Tribes does its business in the city where parks and a public campground are lures for the owners of the automobiles that enter the city on the highways that lead to it from Kansas, Missouri, Arkansas, and Texas.

An electric railroad takes the visitor eight miles to Fort Gibson, the oldest continuous settlement in Oklahoma, where a military fort was established in 1818, and where the first steamboat in Oklahoma tied up in 1828, after ascending the Arkansas River. The fort was abandoned in 1891, but the massive stone buildings are still standing.

On the roster of famous men who knew Fort Gibson in its days of glory are the names of General Zachary Taylor, who was commander before the Mexican War, and Jefferson Davis, who, as lieutenant there courted General Taylor's daughter Betty, with whom he later

COWBOYS AROUND THE CHUCK WAGON, WICHITA NATIONAL FOREST, OKLAHOMA



IN THE TULSA, OKLAHOMA, OIL FIELD

eloped to Van Buren, Arkansas. Henry M. Stanley was once a school teacher at Fort Gibson. In 1834 Washington Irving spent a season there while writing part of "A Tour of the Prairies," and Henry W. Longfellow followed him in 1848.

Some day an author with the genius of a Longfellow or an Irving will tell the story of Oklahoma, which has been called "the culmination and climax of American pioneering."

CHAPTER IX

MISSOURI MEANDERINGS

MISSOURIANS always have been proud of their state. They like to think of the time when there were but two divisions in the territory purchased from France in 1803—Louisiana and Missouri. Then the latter included not only the territory that is now known as Missouri, but all the country now embraced in Arkansas, Iowa, Minnesota west of the Mississippi, Oklahoma, North and South Dakota, Kansas, Nebraska, Montana, as well as most of Colorado and Wyoming.

It was not easy to give up this vast empire to other clamoring territories, but Missouri yielded with a good grace, until yielding seemed to cease to be a virtue. Then she made indignant protest against the inclusion in Iowa of the rich region adjoining her present northern boundary. That protest lasted for nine years, and at times was quite heated. Threatened use of military forces, the arrest of a sheriff, and a little bloodshed led to the final settlement of the affair in favor of Iowa, by the Supreme Court of the United States. This decision was rendered in 1848. Since that time Missourians have devoted themselves with redoubled zeal to rejoicing in the princely domain they were able to retain, and to showing the world that they have reason for pride in their situation, their resources, their scenery, and themselves.

"But call our state 'Muz-zoo-ry!' " was the plea of the official publication issued to boom the Louisiana

THE STOCK YARDS, KANSAS CITY, MISSOURI

Purchase Exposition held in St. Louis in 1904. Surely that message should set at rest all disputes as to the pronunciation of the name of the state that witnessed Daniel Boone's farewell, and Mark Twain's greeting; that lies between the stately eastern city on the Mississippi and the ambitious western city on the Missouri; that possesses both swelling northern uplands and southern Ozark highlands; that lists in its seemingly endless tale of wealth both rich agricultural lands and almost inexhaustible mineral resources. Yes, the controversy should have been settled, but it wasn't settled, it isn't settled, and it can't be settled to the satisfaction of those who rejoice that their home is in Missouri.

One boast of the Missourian is that the state contains the junction of the Mississippi and the Missouri, into what has been called "the largest river in the world"—a claim that has given some justification to the criticism from abroad that Americans are overeager to claim the biggest of everything, even if they have to strain a point to do so. Criticisms of this particular claim may be justified. But there can be no possible objection to the superlatives of those who live in the city located where the Missouri, forsaking its leisurely interstate progress, plunges boldly eastward to join the Mississippi. For in her growth since the days of the pioneers of the westward trails that began at her doors, Kansas City has conquered boundless obstacles. Now she has a right to boast of achievements like the bridging of a broad river, the cutting down of hills and bluffs to make place for great buildings, the filling of deep ravines for arteries of business, the development of residence sections bordering

on boulevards that are parts of an ambitious park system, the completion of the sightly Paseo Parkway, two hundred and fifty feet wide. And the end is not in sight: Kansas City is no more satisfied with herself than she was in the days when Independence was her rival in the Santa Fé trade, until floods destroyed the Independence river landing. Then Kansas City was Westport Landing. The first name, dating from 1838, tells of the location at the mouth of the Kansas River, where bluffs and hills have succeeded in making a city site of rare beauty.

When the emigrants to California ascended the Missouri some of them made Kansas City their outfitting post before beginning the long trip west, but others waited until they reached St. Joseph, the town whose business district was built on the site of the claim prospected in 1838 by a trader from St. Louis, Joseph Rubidoux, at the time of the Platte Purchase from the Sac, Fox, and Iowa tribes. St. Joseph contests with Kansas City the claim to bluffs that make possible the most memorable view far away into Kansas and down the valley of the Missouri.

Fortunately all who were moving westward did not go even so far as Kansas City or St. Joseph, but stopped to make their homes in prairie centres south of the Missouri, like that beautiful residence city, Sedalia, or in the fertile Grand River Valley, to the north.

Early in the nineteenth century a few pioneers stopped before reaching the Grand, and founded old Franklin, on the banks of the Missouri. They remained on this lowland site until the flood of 1818 drove them to the hills, where they built New Franklin. In those days the settlers called the Missouri, Mad River;

they learned to their sorrow not to depend on its varying moods.

Over the river from New Franklin, near Boonville, are many reminders of the Boone family, including Boonesboro in Howard County, and the adjoining Boone County. In Howard County is also Boone's Lick, where, in 1807, the sons of Daniel Boone, with others began the manufacture of salt on a site discovered by the frontiersman from Kentucky who could not remain content amid the surroundings of St. Charles County that seemed to him to be becoming overcrowded. The development of the salt works led to the opening of the Boone's Lick Road, long a way for west-bound pioneers, as was Boone's Wilderness Road, opened by the same Daniel in 1775 from Virginia and North Carolina to Kentucky.

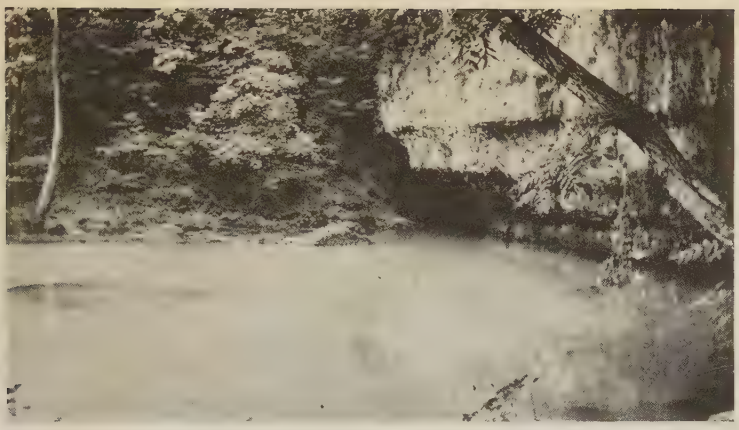
The county seat of Boone County, Columbia, has a memorial to one who made possible the work of Boone and all other pioneers in the Louisiana Purchase—Thomas Jefferson. On the delightful grounds of the State University there is a monument to him, which was originally erected at Monticello, Jefferson's estate in Virginia, from his own designs.

Down on the Missouri, a few miles from Columbia, is a memorial to the great Virginian much more elaborate—Jefferson City, capital of the state, on a sightly location where hills rise one hundrel and fifty feet above the stream. The Capitol, crowning what, on the river side, is one of the steepest of the hills, though it slopes gradually on the side away from the water, was constructed almost entirely of stone from a near-by bluff, while the pillars which are one of its

chief architectural features came from the quarries of Callaway County, across the river.

The commission appointed by the legislature to locate the capital of the commonwealth decided on Jefferson City in 1822, though for a time it was thought the successful candidate would be *Cote sans Dessein* (the hill without design) on the north side of the river, a few miles below Howard's Bluff, as the location of Jefferson City was then known. This curious hill, as one geologist has said, may have been cut off from the hills at the mouth of the Osage, on the opposite bank of the Missouri, so giving passage to the latter river between it and the base of its kindred hills. The commission did well to decide instead on Howard's Bluff, a much more advantageous site.

The Osage River, from its source in the southwestern part of the state, to its mouth between the two sites considered for the capital, passes through a region peculiarly attractive. Cedar County is famous for its healing springs, and for the cave beneath Stockton, the county seat, from which flows a perennial stream. And over in Camden County, on the main river, is Linn Creek, noted because it is close to a cave which contains a pillar of onyx of gigantic proportions, and for a locality of which Bayard Taylor wrote, "I have travelled all over the world, to find here in the heart of Missouri the most magnificent scenery human eye has ever beheld." He referred to the surroundings of what was then known as Gunter's Spring, though the name has since been changed to Hahatonka Spring. A member of the United States Geological Survey declared that though he had spent most of his life in the mountains of the West, he had never found



HAHATONKA SPRING, CAMDEN COUNTY, MISSOURI
Average Flow about 100,000,000 Gallons per Day

GOURD CREEK CAVE, PHELPS COUNTY, MISSOURI

ON THE HUDSON, NEAR GOVERNOR'S ISLAND

another locality that would furnish as many fine photographic views as the region of Hahatonka Spring.

It is the hope of many that efforts will succeed to persuade the Legislature to secure five thousand acres about the Spring for a State Park which will include the varied scenery of river valley, bluffs, mountain springs discharging millions of gallons daily, a lake of ninety acres, a cave entered by boat, a natural amphitheatre surrounded by rock walls, a natural bridge, a balanced rock, and what is known as The Devil's Kitchen.

There are sites for many such parks along the smaller streams south of the Missouri, where strangely numerous courses among the hills and the forests make canoeing an endless delight and photography a pleasure that knows no monotony, where camping and fishing sports rest the weary at all seasons. On the Osage in Camden County, all along the Meramec, on the Niangua, and on the Gasconade, there is abundant opportunity for a popular float trip, where a flat-bottomed boat and a fishing pole, a gun, a canoe, or a quiet companion or an enticing book are all that are needed to provide a vacation that is really what it proposes to be.

Down in Pulaski County there is a spot where the man who knows likes to go—the region of the Moccasin Bend, where, after eight miles, the river returns to within one thousand feet of its own course, after making an eight-mile loop. It has been estimated that a tunnel through the neck would make the water fall twenty feet, and that this would develop five thousand horse power.

The country about the mouth of the Gasconade was familiar to Daniel Boone, who, in 1795, made his final

home at the mouth of the Femme Osage (named for the Osage woman who lost her life while crossing the stream). There, for a time, as a Spanish magistrate, he lived on a tract of eight hundred acres which he lost at the time of the Louisiana Purchase, because he had not completed the entry of his land. Fortunately Congress confirmed the grant to "the man who had opened the way to millions of his fellow men."

The seat of government of the county in which Boone lived, St. Charles, was the first capital of the territory, and until 1804 it gave its name to the largest of the districts into which Upper Louisiana was divided. The town dates from 1786, when it was a French village with two common fields for the use of the inhabitants.

The Spanish Commandant at St. Charles was subordinate to the Governor at St. Louis, for there, in 1765, St. Ange de Bellerive established the capital of Upper Louisiana. In the previous year Pierre Laclède Ligueste, acting for the firm of Maxent, Laclède and Company had ascended the Mississippi from New Orleans, under commission to select a site for a trading post, since the Governor General of Louisiana had given to his firm a monopoly of the fur trade with the Indians for a large region. The story of the tedious river journey made by Laclède and his little band is one of the classics of American adventuring. The boats containing supplies were rowed or towed by man power, three months being required for a trip as far as Fort Chartres. There the supplies were left, while Laclède went farther north to spy out the land. On his return he reported that he had found a situation "which might become hereafter one of the finest cities of America." At least this was the report of his prophecy in the

ST. LOUIS, MISSOURI, FROM THE MISSISSIPPI RIVER

journal of Auguste Chouteau, who, with thirty men, was sent back to the chosen site, there to fell trees and erect cabins. For a time the name given to the new settlement was Pain Court, because of the privations endured.

The growth of the western outpost of civilization founded by Laclède and Chouteau was so rapid that in 1811, H. M. Brackenridge declared it would become "the Memphis of the American Nile." Later on the city became known popularly as the Mound City, "because of the remarkable mound of a mysterious race that stood on a terrace of the bluff by the river until 1869, when it was destroyed to make a railroad fill."

The people of the Mound City have always had magnificent faith in themselves and their destiny. In 1870, by order of the county court, a book was published entitled "St. Louis, the Future Great City of the World." In this, James Parton was quoted as saying that St. Louis would be the future capital of the United States, and of the civilization of the Western Continent. Horace Greeley, so the volume declared, spoke of the city's predestined station as the first inland city on earth!

The publication of the book succeeded in fastening on St. Louis the title "The Future Great." But the citizens rejoice in the knowledge that greatness is not a mere matter of the future; to-day it is marvelously great in many things. Witness its million dollar dock, with equipment and connections; its barge service on the river; its huge railroad terminal; its 2,700 acres of parks, some on the river front, bounded on the waterside by great bluffs, while others contain inland forest and hill and valley; its Shaw's Gardens, founded by

Henry Shaw, an immigrant from England who, having made his fortune in St. Louis, spent his last years in developing a remarkable estate to teach "the wisdom and goodness of God as shown in the growth of flowers, fruits and other products of the vegetable kingdom."

In addition to all these things St. Louis has a multitude of attractions for the tourist, peculiar to itself, from the annual Veiled Prophet's Parade, as distinctive as the Mardi Gras celebration of New Orleans, to the old house out on the Gravois Road where Lieutenant Ulysses S. Grant, then stationed at Jefferson Barracks, courted Julia Dent. Visitors to this hospitable home, now known as White Haven, will approach it on the very road used in 1857 by Grant in hauling cordwood to the St. Louis market from Hardscrabble, where he was struggling to keep the wolf from the door.

Jefferson Barracks, where Lieutenant Grant was stationed for a time, is in the southern part of St. Louis, down the Mississippi toward the splendid scenery that reaches forward to the Meramec River and beyond.

On the banks of that stream the Sieur de Lochon dug lead in 1719, while in 1723 M. de la Motte opened a mine near Fredericktown, southeast of the river, at a spot still known as Mine La Motte, which is, roughly, the centre of the district that produces ninety per cent. of the State's lead.

The feverish desire for wealth of the early French explorers led to the introduction of negro slavery into Missouri; the Sieur de Renault purchased hundreds of slaves in Santo Domingo to work his mines in the Ste. Genevieve district. In 1772 there were in this district nearly three hundred slaves to four hundred free men.

Ste. Genevieve, on the Mississippi, was founded as a shipping point for the lead output. The town was connected also with the early iron industry, of which Iron County was the centre. Several million tons of the mineral have been taken from Pilot Knob, the peculiar hill in the town of the same name which was bought for $18,000, and soon proved to be worth millions.

But the Ozark country, famous as it is for lead and iron and zinc, deserves to be even better known for its glorious scenery; its remarkably uniform summit levels; its curious sink holes, due to collapsing cavern roofs, in the limestone country of the east; its caves farther south and west, where onyx deposits are plentiful; its great game preserve in Taney County; its disappearing streams; its springs down in Shannon and Ozark counties, some of them the largest in the world; its unusual water power on rapid, rock-walled streams, the possibilities of which are revealed by the dam and plant of the Ozark Power and Water Company, on White River, near Forsythe.

And what towns there are in the western hills! Springfield, Queen City of the Ozarks, is famous for the fruit groves around it; Joplin, born in 1870 when lead was discovered in Joplin Creek, is centre of a region where more than one hundred thousand people live within ten miles; Webb City, three miles away was named for John C. Webb who, in 1873, discovered lead on his land while plowing. Carthage, the town to which the people of Joplin and Webb City go when they seek the county seat, has been called "the most beautiful city of its size in America." Incidentally, it is rich because of the wonderful production of zinc and lead in Jasper County.

The best of it is that the beautiful Ozarks are the most centrally located highlands in the United States. They cover a region larger than England, in five states, Missouri, Arkansas, Oklahoma, Kansas, and Illinois, though the greater portion is in Missouri. There they comprise practically half of the state.

Fortunately the name of this highland district is as pleasing as the country—though many of the people who live there do not think so. It sounds like an Indian name, but it isn't; in vain philologists will seek its derivation, until they have the simple key: it is a contraction of the French *Aux Arcs*. In early days when the travellers spoke of going to the French port on the Arkansas, they said, briefly, they were bound *Aux Arcs*. With ease this expression was contracted to Ozarks. At first the new word meant the river Arkansas, then its basin, next the highlands north of it. There great twentieth century smelters have succeeded the primitive methods of former days, and wise seekers after the delights to be found on the hills, in the valleys, and by the streams enter side by side with those unfortunates whose eyes are fixed only on the ground.

CHAPTER X

ALONG THE RIVERS OF IOWA

"THEY are called Aiona, or Mascoutins Nadoessi," wrote a French traveller in 1676, who, as he arrived at Green Bay in what is now Wisconsin, learned of an Indian village of three hundred warriors on the banks of a stream many days' journey beyond the "Misisipi." The name is said to mean "Sleepy Ones." But to apply that definition to the present inhabitants is a libel on people who boast that they live in a region that has "as little waste land as any other equal portion of the earth's surface."

Yet when this country whose lands were so eagerly claimed by settlers was a part of Wisconsin Territory, national leaders looked at it contemptuously. In 1819 Morse's National Geography said, "All settlers who go beyond the Mississippi River will be lost forever to the United States."

The time came, however, when the once despised region was in demand. If Missouri had been given her way, her northern boundary would have been just south of Davenport, more than one-third the way up the present state. So later, when Iowa sought statehood, her citizens had an ambition to venture northward; they wanted the region south of the St. Peter River or even south of St. Anthony Falls. If this request had been granted there would have been added to northern Iowa's delightfully varied and quietly beautiful landscape some of southern Minnesota's sylvan gems—for instance, the nine-mile-long Stockton Valley between

Winona on the Mississippi and Rochester on its own inland stream, where a deep glen twists about in a manner as welcome as it is bewildering.

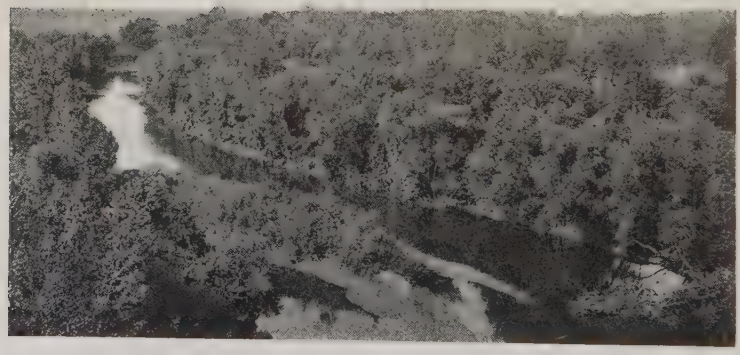
Soon after 1830 the inhabitants of the counties of Wisconsin on the western side of the Mississippi had become so numerous that the Governor pleaded with the legislature to organize for them Dubuque and Des Moines counties. Though this was done, the relief was inadequate, and the people of Iowa urged successfully that they be set apart in a territory of their own. For by that time immigrants were coming in great numbers, to "this blooming belle of the American family." The Easterner was asked to "see the broad Mississippi, with its ten thousand islands, flowing gently and lingeringly along one entire side of the Territory, as if in regret at leaving so delightful a region;" he was told he would see half a dozen navigable rivers, and innumerable creeks and rivulets meandering through rich pasturages; he was to expect to see here and there rich groves of oak and elm and walnut, half shading, half concealing beautiful little lakes, that mirror back their waving branches; and his eyes would rest on neat looking prairies of two or three miles in extent, apparently enclosed by woods on all sides.

Let those who doubt the accuracy of such a description of Iowa follow some of the rivers that flow through lands as attractive as the names of the streams, from the Missouri and the Big Sioux to the Des Moines, which takes its erratic way across the state, the Shell Rock, the Red Cedar and three or four others. Then own that the pioneer who claimed that Iowa was a land of paradise was not far wrong!

When President Lincoln fixed the eastern terminus

WEST FRONT OF THE CAPITOL, DES MOINES, IOWA

LIMESTONE TOWERS, DUBUQUE COUNTY, IOWA



ON THE BOONE RIVER, NEAR WEBSTER CITY, IOWA

of the Union Pacific Railroad on the east side of the Missouri, he made the fortunes of the men who were the early owners of Council Bluffs, at the foot of the high river bluffs, on a part of the broad alluvial plain where the river is endlessly changing its winding course.

In the days when daring steamboatmen, defying bars and shallows and other obstructions of various kinds, pushed on up the stream, they were rewarded by a study of the shore that now must usually be made from dry land. The bottom lands, varying in width from five to twelve or fifteen miles, slip back to a meeting place with the guardian bluffs. At times the bluffs approach close to the river, as in the angle between the Little Sioux and the Missouri, where, in the picturesque language of the state geologist, "the tributary streams have cut into the hills and converted them into a series of intricately connected ridges barely wide enough at times to form a pathway, and with the contours so sloping on either hand that, as one walks along the crest, he unconsciously begins to balance himself as on the comb of a house roof."

Deep narrow ravines, wooded slopes, hidden glens and orphaned hills add to the story of the riverside far up stream toward Sioux City. The best example of the orphaned hills—cut off from the great bluff by tributary streams—is Prospect Hill, in Sioux City.

One of the sights of Sioux City is the obelisk erected in 1901 to Sergeant Floyd, member of the exploring party of Lewis and Clark who died near the mouth of the Big Sioux River, on August 21, 1804. For many years his grave was the pledge of the white man's intention to return to the bluff where, as George Catlin said in 1832, the sergeant was "the sleeping monarch

of the land of silence, sole tenant of the stately wood." The river that enters the Missouri at Sioux City bears the name of this hero-explorer.

The bluffs below the mouth of the near-by Big Sioux River that rise to heights varying from one hundred to three hundred feet, have kindred up that stream; at Westfield there is a notable chalk cliff that rises high above the country scoured out by the great ice sheet.

Between the Sioux River and the upper reaches of the Des Moines River the action of the glaciers constantly appears, but most of all in Dickinson County, where Spirit Lake and Okoboji Lake make the region beautiful after the manner of a bit of Northern Minnesota.

On the shores of Okoboji rises a monument that tells of a day when the scattered pioneers of this Iowa lake country paid dearly for their response to the beauty that drew them into the northwestern portion of Iowa, beyond other settlements and into the heart of a country to which the Indians paid special reverence because of their belief that the gods revealed themselves there. In appreciation of this belief the French interpreter of Lewis and Clark's expedition called the northern lake of the group Lac d'Esprit.

Although stray hunters and trappers followed the early explorers, settlers did not approach the shore until 1856. They were not molested until the spring of 1857, but in March the band of Inkpaduta, a renegade Indian, outlawed even by his own tribe, fell on them and killed many.

The massacre did not prove an interruption to the popularity of the country to the west of the upper Des Moines River; hardy men and women pushed on in numbers to the region of lakes and woods, making use

in their journeys of the Des Moines, even there a considerable stream. Many who had planned to go farther paused on the banks, reluctant to leave the waters that were so often quiet, though at times there were rapids useful for the primitive mills. The crude power developments of early days have a great successor in the municipal power dam at Fort Dodge which impounds a lake eight miles long.

One of the numerous tributaries of the Des Moines coming from the north not far below Fort Dodge, Boone River, winds leisurely across the upland, frequently amid thick trees that crowd close to the banks. After the Boone has entered the Des Moines, the enlarged stream continues its uncertain course across the broad plain that is enclosed by bluffs from one hundred to two hundred feet high.

The bluffs continue here and there down to the Raccoon River and beyond. The mouth of the Raccoon is in the heart of Des Moines. Hills and bluffs and a deep gorge help to make notable this site, chosen in 1843 for Fort Des Moines. From this fort at midnight, October 10, 1845, a signal gun gave leave to anxious settlers to hurry to locations on and near the river which, by treaty, the Sacs and Foxes had given up. Many years later, when lands thus chosen had been well occupied, an elevated site in East Des Moines, commanding a view of the valley for many miles, was selected for the noble capitol building, erected "without scandal, without corruption, without profit."

Beyond the mouth of Middle River, which reaches the Des Moines perhaps twenty miles below the Capital City, the stream becomes more stately; the bluffs are frequently more elevated, and the bends and curves come periodically, though they cannot interfere with

the river's straightforward course down to the Mississippi, bisecting counties in a manner almost geometrical. But even a mathematician would be puzzled to describe the brief interruption to the course across Van Buren County known as the Keosauqua Oxbow. There, for a distance of fourteen miles, the river doubles back on itself, until there are but two miles between the beginning and the ending of its digression from rectitude.

The tale of the Des Moines River is repeated, with delightful variations, along the Iowa River, on whose banks is Iowa City, predecessor of Des Moines as capital (of the territory) and seat of Iowa College, which occupies the old State House grounds; the Cedar River, whose valley led a geologist of 1852 to say, "The rural beauty of this portion of Iowa can hardly be surpassed," and the Maquoketa River, which waters the region where the State Conservation Commission has set aside the Back-bone State Park in Delaware County, a rugged foretaste of the ninety-eight parks which, when the State program is complete, will have been dedicated.

Yet the Commission will not find it possible to include in state parks all the notable beauty spots. They would have to go over to Clayton County and take in their program a bit of the Devil's Gap Road near North Buena Vista. Only a short distance to the southwest, close to the Mississippi, they would lay hands on the tree-covered limestone tower near Durango. Next—

But why go on? The beauty spots of Iowa are not to be catalogued briefly. They are waiting to be seen by the wise pilgrim who does not hurry as he passes through the country of the ancient Aiona.

GRAND VIEW ON THE UPPER IOWA RIVER

CHAPTER XI

IN MICHIGAN'S TWIN PENINSULAS

THE average traveller who skirts the remarkable sixteen-hundred mile coastline of Michigan, crosses its attractive Lower Peninsula, where rivers wander delightfully, where hundreds of lakes sparkle in the beds left by the accommodating ice sheet, or studies the rich Upper Peninsula with its wealth of iron and copper, is startled when he learns that in the days when emigrants were hurrying westward to take up the waiting lands, they passed by the territory that is now included in Michigan. They had been told that for many miles north of Ohio there was nothing but a tamarack swamp; that not one acre in a hundred was worth anything.

Still more surprising is the fact that, in 1835, when Michigan sought admission as a state and was offered the Upper Peninsula in exchange for her claim to a strip of Northern Ohio containing less than five hundred square miles, there were so many who believed the Upper Peninsula valueless that they were ready to fight for the paltry bit of Ohio. In 1834 Delegate Lyon voiced on the floor of the House of Representatives the contemptuous belief of his territory when he declared that no one wanted the Upper Peninsula, because "for a great part of the year Nature had separated the two peninsulas by impassable barriers." So it came to pass that the authorized Constitutional Convention held at Ann Arbor in 1836 rejected the proposal on which statehood depended. When the Governor re-

fused to call a second convention, five citizens acted in his place, and succeeded in having the proposed boundaries ratified. Congress recognized the unauthorized convention, and Michigan became a state, with 22,600 miles of the Upper Peninsula hung, as many thought, like a millstone around its neck.

The first discovery of the iron that opened the eyes of doubters to the value of this Upper Peninsula was made in 1844, by a government surveying party, on the site of Negaunee, on Lake Superior. Since then the development of the iron ranges has been so wonderful that only the opening of the copper ranges that extend from Keweenaw Point down to the Wisconsin line can be compared to it. Yet this was the territory to which a whole state was indifferent! This fact seems strange in view of the early discovery of copper made by the Indians in this region, and the statement of Benjamin Franklin, after his success in drawing the boundary line in the treaty of peace with Great Britain so as to include on the American side the most of the copper:

"The time will come when drawing that line will be considered the greatest service I have rendered my country."

The mineral territory is known for its busy cities and towns, its lakes and rivers that are paradise for the fisherman and the hunter, and its number of good roads, including the touring route along the scenic shore of Lake Superior and the companion highway by Lake Michigan and close to the border of Wisconsin, through the heart of some of the best of the industrial regions of the state.

This southern highway leads to the Straits of Mackinac, where the waters narrow between the elon-

FALLS OF THE MONTREAL RIVER, GOGEBIC COUNTY, MICHIGAN

CASTLE ROCK, NEAR ST. IGNACE, MICHIGAN

gated Upper Peninsula and the Lower Peninsula, whose shape is like a hand in a mitten, with Saginaw Bay in the space between the thumb and the fingers, and Mackinaw at the tip of the fingers.

A few miles down the coast from Mackinaw, at Cheboygan, three of the great Michigan roads meet, after coming from the east, the west and the central part of the peninsula to the south.

One of these roads—the Top of Michigan Trail—leads almost directly south, sixty miles to Grayling, known to those who mourn the destruction of Michigan's great pine forests and who look forward eagerly to reforestation, because it is the site of one of three of the state parks where summer visitors are welcome to camp for weeks by the waters and amid the trees; known to fishermen because of the Fish Hatchery that has stocked the streams of the section with millions of young trout to take the place of the grayling—called "the greatest of all great game fish in America,"—which disappeared when the vanishing forests deprived the streams of the chill the fish needed; known to canoeists because it is a splendid starting-point for a trip down the Au Sable River through one hundred and fifty miles of windings and six hundred feet of fall until it loses itself in Lake Huron.

It is difficult to believe that only a generation ago all this Michigan wilderness was luxuriant with immense forests of virgin white pine, many of the trees measuring six feet in diameter at the base. When the forests of Maine began to give out, lumbermen turned their attention to Michigan, and by 1890 the state was supplying one-fifth of the demands of the entire country. At that time it was estimated that four-fifths

of the state was covered with trees that had taken hundreds of years to grow.

And men destroyed them in a few years. The destruction was ruthless, but it was spectacular. Then, in the flood season, the streams of the Mackinaw country, with such fascinating names as the Tittabawassee and the Shiawassee, were filled from bank to bank with restless, turning, whirling masses of logs; the forests echoed to the sound of the devouring axe, and camps of lumbermen with muscles of steel were everywhere. Lumber towns sprang up in a night, and they disappeared with the forests. But the furniture manufacturing centres, from Cheboygan and Saginaw down to Grand Rapids, have had more enduring growth.

Fortunately it is possible to see what the forests were like, for the Michigan National Forest, to the north of the rushing Au Sable, contains a great expanse of hardwood that has never been touched except for its own protection. Those who follow the Dixie Highway, after passing close to the edge of the forest, enter the headquarters town, Tawas City, located where it commands great Saginaw Bay, then pass on down the coast, skirting the bay, following its southern bordering peninsula, then seeking Port Huron, following the wonderful St. Claire River—connection between Lake St. Claire and Lake Huron—and finally entering Detroit, the wonder city of these days of the automobile.

Both the Dixie Highway and the railroad run many miles from the water from Detroit down to the state's southern boundary—forty miles where the beauty of the land is continually making the traveller forget that

GRAND CIRCUS PARK, DETROIT, MICHIGAN

FROM CAPITAL PARK, DETROIT, MICHIGAN
Looking South down Griswold Street

if he were only a little way farther east he could see the lake.

Monroe is notable not only for its quiet New-England-like beauty, but for the fact that through its heart flows the Raisin River, the stream made famous during the War of 1812 because of the destruction on its banks of American troops by a combined force of British and Indians. By reason of the savagery of that fight, "Remember the Raisin!" became a battle-cry throughout the remainder of the war. The monument that tells of the historic battle and the massacre that followed it is in the park in Monroe on the bank of the river, not far from the highway. The inscription tells how eight hundred Americans fought three thousand British and allies, how they surrendered after the exhaustion of their ammunition, and how—on January 23, 1813—the faithless Indians killed four hundred of the defenceless prisoners.

The Raisin is a small river, but throughout its course it is peculiarly winning. One of the most attractive sections of the stream is where Blissfield spreads itself on both banks, and on an island between. The pioneers from New England who settled this country must have thought of this region with peculiar affection; it was so much like a bit of Connecticut or Massachusetts.

This Lower Michigan country is boundlessly rich. It has thousands of lakes—it is said that in Oakland County alone there are fifteen hundred of them—and it has orchards, and vineyards, and fertile agricultural and grazing lands. Then it has towns like Adrian, where the New England atmosphere is especially apparent; Hillsdale, where Will Carleton laid the founda-

tion for his fame by writing "Betsy and I Are Out;" Ann Arbor, seat of Michigan's great university; Lansing, the capital, on the edge of another country of lakes; Battle Creek, the Sanitarium City, Kalamazoo, the City of Celery, and Grand Rapids, whose fame has gone wherever furniture is used; Niles, part of it on the site of the British fort of St. Joseph, which the Spanish forces captured in 1781, after a twenty-day trip from St. Louis, in a vain attempt to assert their right to the Northwest country; and Three Oaks, where an original beech and maple forest has been dedicated as a wild life reservation. Those who visit its shady borders need go only a few miles north to find a second reservation—a tract bordering on Lake Michigan, where sand dunes from two to three hundred feet high are preserved from desecration and improvement.

And close to these sand dunes grow the delicious Michigan peaches, within easy reach of the steamers that carry them from St. Joseph and Benton Harbor to the waiting millions of Chicago.

CHAPTER XII

THROUGH THE HEART OF WISCONSIN

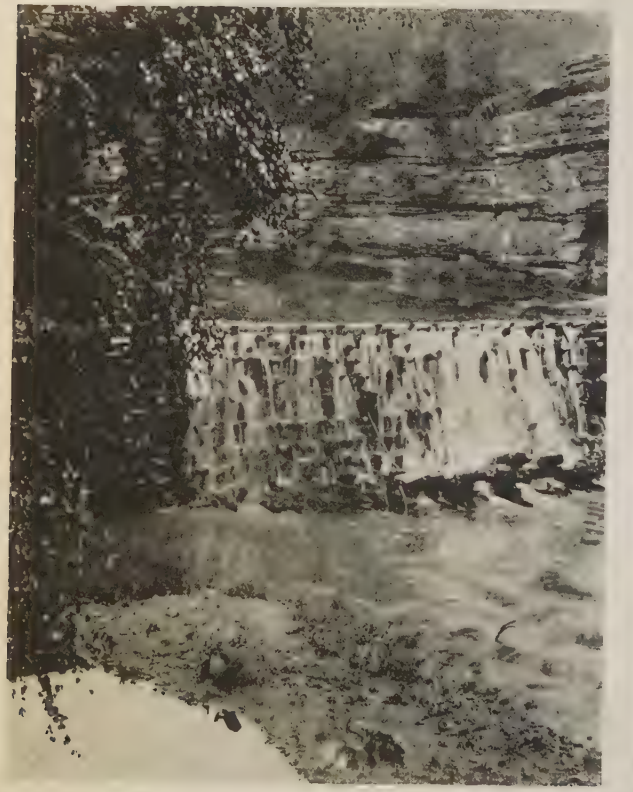
THE traveller who finds his pleasant way from the point where Marinette commands Lake Michigan's Green Bay, along the Menominee River, through the iron country, toward the place where the boundary of Wisconsin touches Lake Superior, does not wonder that, when Congress took Wisconsin Territory from Michigan Territory, the people to the south wanted to have included within their bounds what is now Michigan's Upper Peninsula. They little suspected the mineral wealth of the disputed territory, but they did realize the advantages of the southern shore of Lake Superior as a boundary. Wisconsin did not get what she sought, but she did manage to escape the names Huron and Chippewa, and to retain a wonderland in the northeast that it was once proposed to give to Minnesota, where stately forests, crowding lakes, and interlacing rivers still lure the sportsman, the hunter and the seeker after rest.

There are parts of Northern Wisconsin that are still a wilderness as unbroken as on that day in 1873 when H. D. Fisher sat down to rest close to the Menominee River. While he smoked his pipe, he idly turned over a bit of ground with a stick, and found traces of hematite ore. On that spot the great Florence iron mine was located.

There may be no new iron range awaiting the coming of wanderers in the Wisconsin wilds, but there is beauty unlimited—the beauty of rivers rushing amid

the rocks, as at the Dalles of the St. Croix, site of the notable Interstate Park; of rapids that crowd pleasantly one after the other, as on the Namakagon, the Flambeau, and the Chippewa Rivers; of lakes in chains and lakes that rule the wilderness solitary and alone.

Gradually these wonder wilds are being conquered for utilitarian purposes. Water is being harnessed, as at Chippewa Falls, where the enthusiastic citizen declares there are possibilities second only to those of Niagara Falls. But there will always be those who find less pleasure in calculating horse-power than in following the example of the United States geologist who, in 1852, started for Madeleine Island, beyond Chequamegon Bay, on Lake Superior, ascended the Montreal River, then explored the irregular Lac de Flambeau, and those other lakes whose names are just as irregular, among them Wepetangok and Mashkegwagonsa. Later he traced the sources of the Chippewa and Wisconsin Rivers and followed the latter stream from its beginning, where it is perhaps a dozen yards wide, through boulders; over cataracts; between periodical rock walls; past high hills that rise close enough to the banks to give the impression of being in a gently mountainous country; on to Wausau's Rib Hill, the highest point in Wisconsin, and the contorted rocks of Stevens Point; over the nine miles of Grand Rapids, where tree-clad islands dot the stream; by Pentenwell Peak's rugged uplift with its outlook over miles of undulating country, and precipitous Fortification Rock's majestic face, reaching one hundred feet above the stream; within sight of the chain of hills that looked like forts to the raftsmen who braved the vary-



THE OLD MILL DAM AT DALTON, WISCONSIN

THE HORNET'S NEST, DALLES OF WISCONSIN RIVER

ing moods of the river and the possibilities of the attacks of the Indians; and finally through the famous Dalles—or "the trough"—where, for seven miles, the water twists between walls of sandstone from twenty-five to eighty feet high and from fifty to one hundred feet apart. Once the river flowed in quieter mood in surroundings much more prosaic, but the glacier came and forced it out of its accustomed bed, compelling it to make a channel in the rock.

It is the glory of Kilbourn City that it is in the heart of The Dalles country. Within easy reach of the town is the point where the river narrows suddenly from a width of fourteen hundred feet to about two hundred feet and later, at times, to forty or fifty feet. In rapids and whirlpools, in eddies and cascades, the water swirls beneath the frowning cliffs whose shadows make the river seem black.

With wisdom not always shown by states that possess centres of unusual natural beauty, Wisconsin has set apart The Dalles as a State Park. And only seven miles from The Dalles, and close to Baraboo, the city that gives its name to a rich iron district, another of these state reservations includes Devil's Lake, the most distinctive of the beautiful little bodies of water in Sauk County. From the mile-and-a-half-long basin three hundred feet above the river, the lake looks upon curiously formed cliffs and bluffs like the Devil's Doorway and Cleopatra's Needle.

To the east of Devil's Lake, the Wisconsin, which has been moving almost directly east, takes a sudden notion to bend to the south, and then, almost at once, it changes its mind and begins its hunt for the Mississippi River.

In 1673, when Marquette and his companions were seeking the fabled "Great Water" of which they had been told, it seemed as if the sharp bend of the Wisconsin had been planned especially for the expedition. For at this point—as is related on a monument in Portage, erected to the explorer in 1895—Marquette made his last portage of twenty-seven hundred paces between the sources of the Fox River and the Wisconsin.

Marquette began his journey within the present bounds of Wisconsin where the waters of Green Bay come down from Lake Michigan to meet the Fox River. He entered the Fox at Green Bay, the site of a very early settlement. Between high banks the explorers ascended to De Pere, where the lowlands begin and the first rapids were encountered. But a much greater hindrance was at Kaukauna, where the river falls sixty feet down what has been called an irregular series of limestone stairs half a mile long.

A few miles from Kaukauna, the modern town of Appleton, known as "the gem of the Lower Fox," revels in banks one hundred feet high, ravines that hide many beauty spots, and water-power that is prophetic of the lower reaches of the river.

Beyond Appleton the Fox issues from Lake Winnebago, the generously beautiful body of water, really an inland sea, which, in 1670, Allouez called Lac des Puans. About its varied shores cluster manufacturing towns like Neenah, Menasha, Oshkosh, and Fond du Lac. The Winnebago Rapids distinguish Neenah; a government lock—a part of the vain effort to make available for modern business the waterways between Green Bay and the Mississippi that were a favorite route for explorers and fur traders when New England

was young—is at Menasha; Fond du Lac, like so many other Wisconsin cities, is on the site of an early fur trading post; and Oshkosh was once known as the Sawdust City, because of the filling of the lowlands about the site with the refuse from the mills that were fed by the logs brought down on the Wolf River.

After leaving the future site of Oshkosh, Marquette continued his journey through wild rice sloughs and bits of open water, and over many carries to the last great portage at the Wisconsin River, which he called the Meskonsing.

Thirty miles from Portage he came to the chief village of the Sacs where, nearly one hundred and fifty years later, the fugitive Black Hawk, who had come overland from the Rock River above Lake Koshkonong, attempted to cross the river. Black Hawk's Bluff and the Sugar Loaf, close to Prairie du Sac, both reaching to a height of three hundred feet above the river, are reminders of the flight. Picturesque precipitous bluffs continue at intervals along the stream, notably at Helena, where, in the days of Black Hawk, a shot tower, fed from the lead mines to the south, proved of great use to the militia from Illinois and Wisconsin.

Modern travellers in the path of Marquette note with interest that to his left, both at the beginning and toward the end of his route, are outstanding natural features. Between Green Bay and Lake Michigan, and extending down toward Lake Winnebago, there is the Winnebago Escarpment, a line of bluffs sometimes rising to twelve hundred feet above the lake. Then to the left of the lower part of Marquette's route is the curious Military Ridge, perhaps fifteen miles south of the Wisconsin, and extending from near Madison

entirely to the Mississippi. The advantages presented by this ridge for travel appealed to the Indians, induced the pioneers to locate on its crest the final section of the military road from Green Bay to Prairie du Chien, and led the engineers to place on its winding curves the railroad from Madison to Lancaster. Seldom is a better opportunity presented of studying from a height the great beauty of surrounding country.

Prairie du Chien, at the mouth of the Wisconsin, and northwest of Lancaster and the Military Ridge, was one of the two villages in Wisconsin which had sufficient population to win a place on the map of the United States Census of 1820. The other town was Green Bay, at the beginning of Marquette's route.

But after 1822, a census report would have had to note other towns. For in that year prospectors turned to the region south of the mouth of the Wisconsin, and close to the border of Illinois, in search of lead. At first some of them found shelter in caves dug in a hillside. Because of this they were called badgers, and from them the future state is said to have taken its popular nickname!

The early prominence of this section of Wisconsin accounts for the fact that the first territorial legislature met at Belmont, three miles from the town now known by that name. The earlier town became a candidate for the permanent capital. But there were a dozen other candidates in the field before the prize was given to a place not yet in existence because of the beauty of its projected location on what were then known as First, Second, Third and Fourth Lakes. At once Madison was laid out, a saw mill brought to Milwaukee from the East was carried overland by ox carts, logs were cut in the

WISCONSIN RIVER AND BLUFFS, NEAR PRAIRIE DU SAC, WISCONSIN
From top of Black Hawk Bluff

IN THE MENOMINEE INDIAN RESERVATION, SHAWANO COUNTY, WISCONSIN

forests about the lake, stone was rafted across Fourth Lake, and soon the beginnings of the capital city had been made. Later the meaningless names of the four lakes were changed to Kegonsa, Waubesa, Monona and Mendota. Those who have stood on the shore of one of the lakes, or have looked from Mendota's Prophet's Rock or from its bluffs on the grounds of the State University, still see the vision in dreams by day and by night, and long to go back for another view of city and water, of field and forest.

If the contention of many early dwellers in Wisconsin had been listened to by Congress, the location of Madison might have been more central. They contended that, according to the original purpose of the creation of the Northwest Territory, Illinois should never have had frontage on Lake Michigan; that 8,500 square miles of Illinois, containing Chicago, Evanston, Waukegan, Freeport, Rockford, Galena, Dixon and Elgin, should have belonged to Wisconsin. At first Wisconsin Territory settlers opposed the thought of the transfer of the region to them, because they did not wish statehood for a time, and they feared that the addition of the population in this strip would force what they wished postponed. Yet in 1842, the Governor of Wisconsin told the Governor of Illinois that the disputed ground belonged to the northern state. By a bare majority the legislature threatened secession if Congress did not do what was claimed as justice. But Congress disregarded the threat, and the legislature forgot it. So Wisconsin generously shares Lake Michigan with Illinois.

CHAPTER XIII

THE INTERSTATE MISSISSIPPI

"THE most beautiful river scenery in the world, sir! Nothing like it on this continent or any other! You doubt it? Then take a packet—if you can find one in these degenerate days—bound from St. Louis to St. Paul. If you can't do better, take one from Rock Island to St. Paul. And keep your eyes open. You'll lose your doubts, all right! Before you go, you'll wish the sun would stand still; you'll be jealous of the darkness that hides so many wonders."

The veteran steamboatman paused a moment for breath. Then his enthusiasm once more found expression.

"I went up and down the river so many times I gave up the count after a few years. Maybe you think I know the country so well that I wouldn't care to see it again! I would like nothing better than to take passage on the slowest boat, and dawdle along for a week, so as to be able to enjoy at my leisure the varied beauties of river, bluff and island."

That riverman would have understood the old lady, seated in the parlor car of one of the luxurious express trains that follow the river bank from Savanna, Illinois, to St. Paul, whose eyes were riveted by the hour on the ever-changing panorama. A fellow passenger who was making the journey for the second time, ventured to call her attention to an odd feature of the bluffs. "Yes, isn't it wonderful?" she agreed. "I was born on the river, and I have lived here all my life. But I make it

a rule to take this ride twice each year, so as to renew my acquaintance with the bluffs to which you pointed, as well as a thousand other bits of friendly delight."

Better than the window of a parlor car is a seat on the rear platform of the train that follows the bank—except when it makes an arc across the bend of the meandering stream. Then it is possible to look on the stream itself, to lift the eyes to the distant shore, or to wonder at the bluffs that rise in majesty to summits which the Indians thought were under the special guardianship of the gods.

To-day a steamer is such a rare sight on the upper Mississippi that when passengers catch a glimpse of a packet breasting the current or going more rapidly down stream, they experience something of the thrill that comes to the sea traveller who sees a sail on the horizon. Yet half a century ago a steamer on the river caused no more comment than an automobile on the road does to-day. Half a dozen might be in sight at one time, from the slow boat of shallow draft, designed to "slide on a drop of dew," in low water, to others like the mighty *Grey Eagle,* which carried from Dunleith to St. Paul the message of Queen Victoria congratulating President Buchanan on the completion of the ill-fated ocean cable of 1856; it made the two hundred and ninety miles in eighteen hours.

Those were the days when a steamboat would, sometimes, pay for itself in two or three good round trips. The average life of a boat was but four or five years. Yet who cared for this fact, since it was possible to make eighteen or twenty round trips a season? The spirit of speculation that made men willing to invest money in a steamer when they knew well the boat might

be lost on the first voyage was like that of the pioneers on the banks. Desire for adventure led some of them to battle earnestly with the wilderness, but there were those who were content to let others do the venturing, while they reaped ill-gotten gains. Men of this sort were responsible for founding the paper town of Nininger, near Hastings, Minnesota, close to the beginning of the Mississippi's interstate wanderings. Investors were attracted by issues of the *Daily Bugle,* printed on the first power press in Minnesota, in which advertisements and even the news were pure inventions, for there was hardly a *bona fide* resident in the place. The daily prospered for a time on the gold of the East, and its publishers succeeded in selling the river itself at the rate of ten thousand dollars an acre, while land for a distance of two miles from the current was promised in ornate contracts by a man who had not taken the trouble to perfect his own title!

Not far from the scene of the Nininger boomers' exploits was a town of much local fame during the palmy days of the steamboats—Prescott, Wisconsin. With Hastings, Minnesota, Prescott shares the distinction of being close to the meeting point of the turbulent St. Croix River and the Mississippi. In 1689 this location, close to the foot of St. Croix Lake, appealed to Le Sueur when he wanted to locate a fortified trading post. The presence below Prescott of advantageous islands, favorite hunting grounds for the Indians, as well as long sloughs by which the islands were formed, and the widening of the river on their account, led the trader to decide on one of the islands for the centre of his operations. Thus Le Sueur's fort was between the Sioux on the west bank, and the Chippewas

UP THE VERMILION RIVER, HASTINGS, MINNESOTA

BARN BLUFF, MISSISSIPPI RIVER, RED WING, MINNESOTA

on the east bank who roamed on lands claimed by the Sioux. At times the hereditary enmity between the men of the tribes broke out at the fort, and it continued to manifest itself when steamboats were bringing settlers into the new country. The presence of hundreds of Chippewas in Prescott was a steady invitation to the Sioux, whose periodical visits to the Wisconsin town were marked by war whoops and reckless shooting that terrified the residents as well as the travellers brought by the river.

"We're not very lively to-day," said a resident of Prescott, ruefully. "But what a place this was when it was the outfitting point for the great lumber rafts towed down from Stillwater! Here the riverman made ready for the trip to Lake Pepin and beyond, and here they spent like water their hard-earned wages. The levee may be deserted now, but it was a busy place then. And it was a picturesque place at night. Think of three or four steamboats loading and unloading at once, the roustabouts passing to and from the shore by the light of torches set in wire baskets and hung from iron standards fastened to the deck! I can see now the leaping of the flame, and the grotesque shadows cast as it rose and fell, and I can hear the hiss of the red coals as they dropped into the river. Those were the days! Now the few steamers that come to us do their night work by the prosaic electric searchlight. You can't get eloquent over that!"

The Sioux who helped to make things lively in the Prescott of the first-half of the nineteenth century came from the neighborhood of Red Wing, lower down on the Minnesota shore, the town which boasts a situation close to La Grange, or Barn Bluff, that

majestic sentinel rising far above the water—a landmark to French explorers and Spanish adventurers, Jesuit fathers and early missionaries, fur traders and Government emissaries.

Red Wing looks out on Lake Pepin, the beautiful widening of the Mississippi caused by the inability of the river to carry all the soil brought down by the Chippewa River. This stream empties into the Mississippi at the end of the twenty-two miles of the expanse that is from two to three miles wide. Not an island breaks the sweep of the waters, which should be seen not merely from the steamer or the railway train, but also from the bluffs that border it all the way, and from the lofty Maiden Rock, which rules the central eastern shore from its height of four hundred feet. This rock, so the story goes, is named for Winona, who loved a hunter. Her family drove the hunter away, and tried to force her to marry the warrior. And on a day when a party from the tribe went to Lake Pepin to gather blue pigment for war paint, Winona, in the presence of the warrior and of her unsympathetic family, climbed the bluff, sang her death song, and threw herself into the waters far below.

The bluffs of Alma, the entrance into the Mississippi of the beautiful Waumandee River, and the towering vine-clad heights of Fountain City, prepare the traveller for the inevitable comparison of this stretch of river with the Rhine, which was given official sanction in 1852 by David Dale Owen, United States Geologist. His loving description of the country should be lifted out of the forbidding official document in which it found place:

LOOKING EAST ACROSS LAKE PEPIN, NEAR MAIDEN ROCK, WISCONSIN

MAIDEN ROCK, LAKE PEPIN, MISSISSIPPI RIVER

"The features of the scene, though less proud and bold than those of mountainous regions, are yet impressive and strongly marked. We find the luxuriant sward, clothing the hill slope even down to the water's edge. We have the steep cliff, shooting up through it in mural escarpments. We have the stream, clear as crystal, now quiet and smooth and glassy, then ruffled by a temporary rapid, or, when a terrace of rock abruptly crosses it, broken up into a small, romantic cascade. We have clumps of trees, disposed with an effect that might baffle the landscape gardener, now crowning the grassy height, now dotting the green slope with partial and isolated shade. From the hill top, the intervening valleys wear the aspect of cultivated meadows and rich pasture-grounds, irrigated by frequent rivulets that wend their way through fields of wild hay, fringed with flourishing willows. On the summit levels spreads the wide prairie, decked with flowers of the gayest hue—its long, undulating waves stretching away till sky and meadow mingle on the distant horizon. The whole combination suggests the idea, not of an aboriginal wilderness, inhabited by savage tribes, but of a country lately under a high state of cultivation, and suddenly deserted by its inhabitants, the dwellings, indeed, gone, but the castle-towers of their chieftains only partially destroyed, and showing, in ruins, on the rocky summits around. This latter feature especially aids the delusion, for the peculiar aspect of the exposed limestone and its manner of weathering, cause it to assume a resemblance, somewhat fantastic, indeed, but yet wonderfully close and faithful, to the dilapidated wall, with its crowning parapet and its projecting buttresses, and its flanking

tower, and even the lesser details that mark the fortress of the olden time."

Wisconsin's State Geologist insists that Owen's panegyric belongs of right to most of the Mississippi gorge of nearly nine hundred miles, from the mouth of the Ohio to the Falls of St. Anthony. Sometimes this gorge is only a mile wide; again it is five or six miles from bluff to bluff. Frequently the bluffs are but one hundred feet high, yet heights of four and five hundred feet are not uncommon.

Flanked by some of the most pleasing of these castellated bluffs, Winona sits by the western shore, a few miles below Fountain City. The bustling little city is visited by occasional packets, but its docks have not the animation of the old days. Yet it has not lost the civic pride that was born in days before river prosperity gave way to the more substantial developments of a later day. "Please don't say it so short," was the plea made to a stranger in the city by a young man. "You said Wĭnona. Won't you say Wīnona, please?"

"Surely I will!" was the reply. "But why are you so eager?"

"It's our Chamber of Commerce," came the reply. "Folks were so in the habit of saying the wrong thing that the leaders started a campaign for the long 'i'. You see, I was one of the thousands who agreed to set people right when they make the error."

Residents of Winona like to take visitors down to the Sugar Loaf, the curiously formed bluff that gives a superb view up toward Fountain City and down toward Trempealeau on the Wisconsin shore, where are bluffs that once belonged to what is now Minnesota.

Ages ago the river changed its course, and as a result Wisconsin possesses one of the most striking features of the upper Mississippi—a bluff that terminates in a peak of many names. To the Winnebago Indians it was *Hay-me-ah-chah,* the soaking mountain. To the Dakotas it was *Min-nay-chon-ka-hah,* or the bluff in the water. The French, translating the Indian description, called it *La Montagne qui trempe à l'eau,* the hill which stands in the water.

"What time is it?" was the question of a passenger when the train was speeding along near Trempealeau. His neighbor did not reply. "What time is it, I say?" Reluctantly the passenger he was addressing withdrew his eyes from the wondrous scene slipping by so relentlessly. "Time? I know nothing about time," he said, dreamily. "I came here to forget time and business, everything but this!" And he waved his hand toward the water, then toward the bluffs and the blue sky with its scudding clouds casting fleeting shadows on the surface of the river.

The traveller who could think only of time was satisfied when the train entered La Crosse: he could look at the unpicturesque face of a clock. But his neighbor was finding delight in the evidences of beauty in the bustling town, in the thought of the thousands of emigrants who sought the river in their effort to pass on to Minnesota and the Dakotas, and in imagining that he could decide just where the Indians used to play their favorite game, *Ta-kap-si-kap-a,* which the French called La Crosse. The city is built on one of the favorite spots for playing the game.

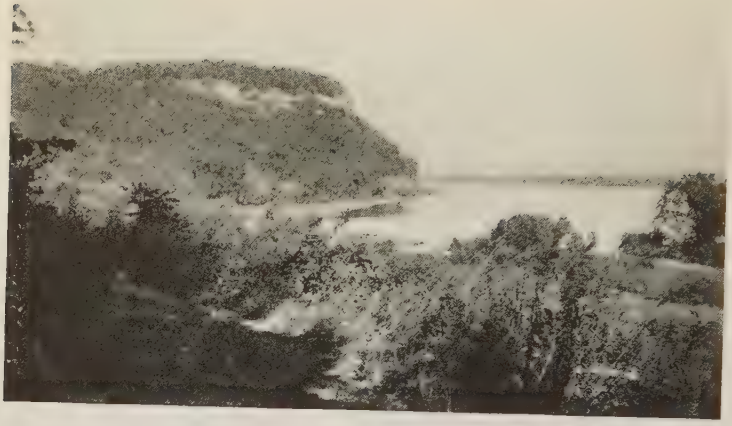
Below La Crosse, history and romance increase the spell of the superb scenery. Genoa, settled in 1850 by

emigrants who were reminded there of the sunny skies, the green slopes and the limpid waters of their native Italy, is near neighbor to Victory, scene of the final disastrous battle in 1832 between the forces of the United States and the misguided Indians who had followed Black Hawk from Illinois into Wisconsin, and were trying to escape across the Mississippi. Close at hand is Bad Axe River, from which the battle took its name, while out in the river is Battle Island, where Black Hawk paused in his escape to the Iowa shore.

A few miles from the site of the battle De Soto looks up at the bluffs full five hundred feet high. One of them was made memorable by the burial of Minnehaha. And across the river, with its clustering islands, and across Winniesheek Slough, which leaves the stream at the right of the islands and flows nineteen miles before it again joins the Mississippi, is a monument much different from that marking the grave of Minnehaha. The monument is Allamakee County, over in Iowa; it tells of a trapper with whom the Winnebago Indians had dealings, pleasant and unpleasant. But it is useless to figure out his name from the title of the county, even if the transition does seem easy when the name is given; his mother called him Alex Magee, and the Indians did their best at pronunciation when they called him Allamakee!

Just below the northern border of the county of Alex Magee another monument stands by the river—the town of McGregor. This tells of the days when Spain claimed the whole Mississippi country. Among numerous land grants made by the European powers was one to Basil Girard. Efforts to overturn the Spanish title were futile, for in 1844 the United States

AT GENOA, WISCONSIN



BLUFFS OF THE MISSISSIPPI RIVER AT McGREGOR, IOWA

LOOKING NORTH FROM McGREGOR, IOWA
Site of Proposed Mississippi Valley National Park

Supreme Court held that it was valid. In September, 1805, Zebulon Pike's exploring party paused on the grant long enough to decide that Pike's Hill, commanding the river, was a suitable location for a military post.

But long before the days of the American Pike or even of the Spanish grant, the wonderfully beautiful stretch of river in the vicinity of McGregor was visited by adventurous Marquette, who—in 1673—emerged from the Wisconsin river where it enters the Mississippi across from McGregor. Amazed by the multitude of islands, the lagoons, and the bewildering channels, Marquette declared in his journal that the sight "caused a joy that I cannot explain."

At the mouth of the Wisconsin River is a town which bears a name that, in the French, sounds as if it belonged to the wild, majestic scenery. Who would ask for a finer name for a town than Prairie du Chien? Yet, translated, it is only "The Prairie of the Dog." The tradition is that an Indian known as The Dog once lived there.

Wisconsin has set apart as a State Park some of the wooded lands adjacent to the mouth of the Wisconsin, but it is hoped that there will be soon, by direction of Congress, a Mississippi Valley National Park, to include bluffs and forests in the neighborhood of McGregor and Prairie du Chien.

It would be difficult to limit the boundaries of such a park, for the river becomes even more picturesque south of Prairie du Chien. For more than twenty miles the bluffs and the islands are in a continual contest to keep the eyes of the traveller fastened upon them.

Dubuque, on the Iowa shore, boasts of its sightly bluffs, while it tells to visitors a story that is hundreds

of years old. Before 1700 a trading post was established there, known as Perrot's Mines, where Indians traded lead from mines they had discovered to the representative of the Governor of New France. In 1788 Julien Dubuque came from Canada to trade with the Fox Indians, who had a large village at the mouth of Catfish Creek, on the present site of the city named for him. Claiming to be a Spaniard, he secured a monopoly of the lead business, called the shaft he worked "Spanish Mine," and asked Carondelet, Governor of Louisiana, to confirm his right to lands he had secured from the Indians as far south as the mouth of the Maquoketa River. Later he transferred one-half of the land he claimed to Chouteau, in St. Louis. But the Spanish grant was not confirmed by the United States, on the ground that the original concession was merely for mining.

Early Dubuque shared with Galena, over in the rugged northwest corner of Illinois, the river trade in lead ore. As early as 1687 Hennepin located a lead mine in the vicinity of the present city. The Illinois lead city is not on the Mississippi, but is so close to it that approach was then easy by means of the Galena River—or the Fever River, as it was called—a stream whose surroundings are far more pleasing than the name given it by the pioneers.

This section of the river must have presented a busy scene when Galena was in its first glory. For many years the city of the lead mines was better known than infant Chicago.

The bluffs of this section of the Mississippi are notable. One of them, near Savanna, has always attracted attention because little imagination is re-

quired to see the profile of an Indian in a portion of the rocky precipice. As the traveller proceeds, so many other fantastic shapes appear that when he is told he is passing Cromwell's Nose he looks for some formation of limestone rocks. He soon learns, however, that the reference is not to the bluffs, but to the southeastward sweep of the river, beginning some distance above Galena, which enables Iowa to claim a magnificent area that is bounded on the north by Illinois. Soon, however, the undependable river turns to the southwest, cutting into Iowa with the first of the sweeping bends that make so symmetrical the western border of Illinois. Cromwell's Nose is bordered by bluffs, which are enhanced by the entrance, from the west, of the Wapsepinicon and the Maquoketa Rivers, through tributary gorges, bluff-bordered, of their own. This is a section of river where it is so easy to linger for another look.

At rare intervals a stern-wheeler churns the waters of Cromwell's Nose. But many of the visitors to the landings along the river are not packets but utility boats—a travelling grocery store, a fish market, or possibly a "show-boat," its interior fitted up with miniature stage, scenery, boxes, and seats, which moves from landing to landing in the effort to lure nickels and dimes from those who welcome such a break in the monotony of their lives by the stream that once played a tremendous part in the life of the West.

Probably the most frequent visitors along this part of the river are the boats of the seekers for mussel shells, followers of the Iowa farm laborer who, while fishing in the Mississippi, caught a black shelled clam. He was about to throw it back when he was struck by the similarity of the shell to the material

from which he had made buttons when he was a boy in Europe. Later he made experiments and constructed special machinery for button making. The result has been the creation of a new industry in the Mississippi Valley—fishing for mussels, and the establishment of great factories which turn out buttons by the million. Many of those who fish hope to find a fresh-water slug pearl that will sell well; the gambler's spirit animates a majority of the fishermen. And frequently a pearl worth fifty or one hundred dollars is found, while pearls worth ten or twenty times as much are not unknown.

Pearl fishermen frequent the waterfront at Clinton, Iowa, and across the river at Fulton, where a government dam in the stream makes the eyes of the navigator glisten in time of low water, while broad, beautifully shaded streets make travellers eager to step on shore.

Yet the lure of the river will draw them away quickly, for the stretch below Fulton is one of the most delightful sections of the Mississippi. In holding this opinion, white men are following the example of the Indians, whose desire to retain their fishing and hunting grounds led some of them, on July 19, 1814, to ambush a boatload of soldiers who were on their way to strengthen the garrison at Prairie du Chien. More than one hundred men set out one morning from Rock Island in keel-boats. Not long afterward while they were in the rapids, a wind storm drove one of the barges ashore on an island, where they were attacked by lurking Indians under Black Hawk. Most of the soldiers succeeded in regaining their boat; this was pushed off into the rapids. Soon, however, the frail vessel caught fire. The two boatloads which had ascended the stream

some distance dropped down, and rescued most of those who had survived the treacherous attack on the island. This scene of what has been called "one of the most gallant actions recorded in the West" is now known as Campbell's Island, in honor of the commander of the expedition, which lost twenty-four men that day. There a monument has been erected by the State of Illinois. It is proposed to make the island a State Park.

The rapids where the soldiers were driven ashore make this the swiftest portion of the river between Minneapolis and the Missouri River. The average fall is only a little over half a foot to a mile, but in the Rock Island rapids the fall is three times as great. Le Clare Canal, from Le Clare to Smith's Island, fourteen miles, and a lock and dam near the head of Arsenal Island, have been built to enable vessels to use the river with safety.

On Arsenal Island there is a government arsenal, which is one of the chief attractions of the beautiful, bustling Tri-Cities, Moline and Rock Island, Illinois, celebrated for their agricultural implements, and industrial Davenport, Iowa, with its pleasing combination of lowland, tree-covered bluffs, and the varied hills beyond, with their inviting homes, whose occupants find themselves in the midst of history as well as beauty almost as soon as they step out-of-doors.

Between Rock Island and Davenport is the replica of old Fort Armstrong, built in 1916 to commemorate the centennial of the building of the original fort. It is a curious structure of mortised logs which looks as if the upper half had been moved on its axis, until the corners rest halfway between the corners of the lower section.

The name Rock Island is actually descriptive; the city is built on the only rock island in the vicinity. All other islands are alluvial. But the traveller finds it difficult to decide whether rock or alluvium makes the more picturesque island. At any rate the seekers after beauty have an embarrassment of riches to choose from when they loiter in the neighborhood of the Tri-Cities.

It is well worth while to break the river journey at Rock Island, not only for a study of the clustering cities, but for the sake of a fascinating land journey. The Arsenal City is the terminus of the Hennepin Canal, seventy-five miles long, opened in 1907 to provide the final link for the passage of boats from Chicago to the Mississippi River. Who could ask a more restful vacation than a journey with a properly loquacious canal boatman, at first in the path of the rebel Black Hawk, around the Rock River Rapids, through thirty-three locks, over some of the best sections of rural Illinois, to the Great Bend of the Illinois River at Hennepin, then up the Illinois and Michigan Canal, the Chicago Sanitary Canal, and the Chicago River, to Lake Michigan?

Some distance below Rock Island is Muscatine, Iowa, the home of the first discoverer of the mussel shell's possibilities for making pearl buttons, situated close to the island which the Indians called Muscatine—Fire Island. From this point the river, which has seemed for a time to change its mind as to its direction, turns south once more, past Oquawka, Illinois, once a rival of Burlington, Iowa, still farther south, until the railroad bridge was built there instead of at the Illinois town. So to-day Oquawka has less than a thousand

people, while Burlington is a city of twenty-five thousand, on a through route to the west.

The surroundings of Burlington—bluffs and gorges, springs, cascades, and caves—are of surpassing interest, down to the river that enters the Mississippi from Iowa a few miles below the city. The name of that stream cannot detract from its beauty; it is known as the Skunk, a translation of the Sac name *Chicaqua,* and the Pottawattamie, *Chicago.* How fortunate it is that the Indian name was used for the great city by Lake Michigan, instead of the English translation!

Below Skunk River the desperadoes who terrorized the Upper Mississippi for fifty years were at their worst. From their hiding places in the islands or in the ravines that broke the bluffs on the shore they dashed out on travellers. Their special delight was to lie in wait for the Galena ore boats, bound to St. Louis. Nauvoo, on the Illinois shore, was a favorite resort of these law-breakers.

But Nauvoo, noted to-day for its glorious situation above a succession of terraces that lead from the river, was once known for something besides pirates. In 1840 the Mormons, driven from Missouri, settled in Nauvoo, on a site that has been compared to that of Leghorn. They were under the protection of the State of Illinois, which granted to the City of the Saints a charter that gave unexampled powers. They were allowed to make laws that were not in conflict with those of the United States—nothing was said of the laws of the state—and permission was given to organize the Nauvoo Legion, which later contained four thousand trained soldiers.

The city grew until within a few years there were fifteen thousand inhabitants; except St. Louis, it was

the largest centre of population in the Mississippi Valley, much larger than Chicago. A wonderful temple was built, and other preparations made to perfect the city that was called "the beautiful." A petition was sent to Congress for a separate territorial government with Nauvoo as the capital. Joseph Smith, the leader announced himself as a candidate for President of the United States and sent out three thousand missionaries to boost his claim. Pretensions like these aroused opposition. Finally, in 1844, Joseph Smith and his brother Hyrum were arrested for riot, and were lodged in jail in Carthage, the county seat of Hancock County, where a mob killed them. Two years later the Mormons were ordered to leave the state. The leaders crossed the Mississippi on the ice, and were followed by those who took with them the twelve thousand wagons built in Nauvoo for the migration to Utah. In 1848 an incendiary burned the temple. One by one other landmarks in the town were destroyed. To-day less than one thousand people live there, but it is one of the largest towns on the river without a railroad.

The year after the Mormons deserted Nauvoo, the property was purchased by a colony of Icarians which had gone to Texas, the year before, from France, the advance guard of a proposed republic. The final twenty miles of their journey was made overland from Warsaw, twenty miles away, because the river was blocked by ice. In Nauvoo they organized a commonwealth, with a General Assembly and a President. Mills and workshops were built, and property was held in common. There was a library of six thousand volumes. Visitors were attracted to it, and many of them remained. It has been said, "Perhaps no other move-

ON THE MISSISSIPPI, NEAR DUBUQUE, IOWA

POWER HOUSE, DAM AND LOCKS OF THE MISSISSIPPI POWER COMPANY, KEOKUK, IOWA

ment has so stirred a continent at its beginning, only to sink without a ripple at its end."

From across the river another historic town, Montrose, has looked out on Nauvoo's changing populations. Montrose is historic because it is built on a part of an old Spanish grant, which in 1804 the assignee sold in St. Louis for one hundred and fifty dollars. In an early gazetteer Montrose was mentioned as having a broad and handsome flat, sufficient for a large city. But the populous centres of the county are now Fort Madison, to the north, and Keokuk, to the south.

The original Keokuk, a village of the Sacs and Foxes, was farther south, not far from one of the branches of the Iowa River. The river town took its name not only from the village, but from Keokuk, the friend of the white man, who did his best to restrain Black Hawk from going on the war path, and was made chief by his people after the defeat of the man he had tried to keep in the paths of peace.

In the days when steamboat traffic was at its height, rivermen dreaded the twelve miles of the Des Moines Rapids, above Keokuk. Probably they would have agreed that the Indian name, Moingona, would be more in accord with the feelings of those who must have felt like moaning when they passed that way; but the French explorers, true to their penchant for shortening names, called them simply Des Moines.

The travail of the boatmen was ended by the completion in 1877 of the canal around the rapids, twelve miles long, which cost five million dollars. This wonderful canal was maintained until the ambitious project of the Mississippi Power Company's Lake Keokuk—above the dam that looks like a long, low concrete

bridge, nearly a mile long, with arches fifty-three feet high—made it unnecessary. Now a single lock connects the river channel with the lake, though three locks were necessary on the old canal. This lock has a lift of forty feet, is as wide as the locks of the Panama Canal, and can be filled in eight minutes. The lock and dam, constructed by the company, were turned over to the Government, but the Company maintains the power plant, which produces three hundred thousand horse power, and supplies current even to St. Louis, one hundred and forty-four miles distant.

Between Keokuk and St. Louis the traveller's interest becomes greater even than before. The widening river, the bluffs, sometimes high, sometimes low, the hints that come of the revelations in store for him who travels inland, and the towns and cities scattered along the banks, keep eyes and thoughts busy. On the one shore he sees Quincy, so pleasantly situated on the bluff, and on the Missouri side, soon afterward, he finds himself opposite Hannibal, famed for many things, but most of all because there Mark Twain spent his boyhood, played his pranks with Tom Sawyer and Huckleberry Finn, discovered a cave, experimented with black measles that he might escape school, and told marvellous tales that led sympathetic mothers to declare that it was necessary to discount them only ninety per cent.

One of the choicest drives in Hannibal leads to the authentic Mark Twain cave. Another is high above the river, with its green islands, and the Illinois shore that looks as if it might have more attractions than the Missouri shore—until the journey to it shows that here is a case of six of one and half a dozen of the other.

Soon after Hannibal is left behind the peculiar rugged lands of the ever-narrowing region between the Illinois and Mississippi rivers show back of the bluffs. These become more noticeable as the journey is continued. Close to the mouth of the Illinois some heights reach eight hundred feet.

Between the Illinois and the Missouri, at the mouth of the Piasa, some distance above Alton, Illinois, there is a high bluff whose upper face is almost perpendicular. This bluff has been famous since the days of the early explorers because of two fantastic figures painted in hollow relief on the most inaccessible portion of the rocks. Listen to what Marquette wrote of them:

"While skirting some rocks, which by their height and length inspired us, we saw upon one of them two painted monsters which at first made us afraid and upon which the boldest savages durst not long rest their eyes. They are as large as a calf. They have horns on their heads like those of a deer, a horrible look, red eyes, a beard like a tiger's, a face somewhat like a man's, body covered with scales, and so long a tail that it winds all around the body, passing above the head and going back between the legs, ending in a fish's tail. Green, red, and black are the three colors composing the picture. Moreover, these two monsters are so well painted that we cannot believe any savage is their author; for good painters in France would find it difficult to paint so well, and besides, they are so high up on the rock that it is difficult to reach that place conveniently to paint them."

The painted monsters were dreaded by the Piasa Indians, because of the tale of their origin. The legend told of a monstrous bird with horns that devoured a

maiden from the tribe at regular intervals. At last the son of a chief shot the bird of ill omen, but lost his life in the attempt. The paintings were made to commemorate his feat.

Unfortunately what were perhaps the most remarkable examples of Indian art were almost entirely destroyed by a quarryman in 1857, but it is claimed by some travellers who pass near by on the river that they can make out traces of the artist's work.

Less imaginative people can console themselves by the sight of Alton, where Elijah P. Lovejoy, one of the early martyrs of the anti-slavery cause, lost his life in 1837. The city was famous in early days as the beginning of the river journey for thousands of families who were going out to settle in Kansas and Nebraska, and is noted to-day for the variety of its rocks, the steepness of its streets, and the generally alluring features of its landscape. One delighted visitor to the city wrote of it to a friend: "The Englishman who said that Alton was all 'ills, 'ollows, and 'oles left out something—the stone walls. Everybody has one at the back, the front, or all around his yard."

A few miles below Alton the Missouri enters the Mississippi, at a point dreaded by the cautious rivermen, because there the current of one stream plays tricks with the current of the other. The passenger may not be aware of these difficulties, but he is conscious of the sharply defined line between the waters of the two streams, for they refuse to mix for many miles below the mouth.

How many difficulties for the navigator would have been obviated if the rivers united to-day at the spot which geology says was their place of marriage ages

ago! This spot is marked by the Mamelles, where the bluffs on the Mississippi meet the bluffs on the Missouri. The slow deposit of alluvium has built up the peninsula between the two rivers, so that now the Missouri clings to the Charbonnier bluffs, and the Mississippi to the Illinois bluffs. Some of the pioneers who stood on the Mamelles said that the view spread out before them was one of the most romantic and beautiful in the United States. Both rivers, with their cliffs, are visible, while the mouth of the Illinois River and the vast prairies to the east may also be seen.

Near the present mouth of the Missouri is another bit of river of which the steamboat-men have learned to beware—the Chain of Rocks, where St. Louis gets her water-supply. Time was when she was content to drink water from nearer home, but that day is in the past almost as much as the peak of the river traffic, of which old residents tell with reminiscent pride.

"And why not be proud of it?" an old pilot said to a traveller. "What a pageant the city has seen! There were the early voyagers who went down the river, and others who breasted the current. Gradually traffic increased, until 1787, which was called 'the year of the ten boats,' for ten barges arrived together, bearing sugar and spices from New Orleans, and returned with furs, salt, beef, and wheat. In 1815 came the first steamboat, the *Pike*. Gradually traffic grew until what is now known as the Golden Age of Steamboating, from 1845 to 1865, when the river-front was one of the famous American scenes. Frequently the steamboats were at the levee three or four deep. Think of nearly three thousand arrivals in a single year! Life was worth living then."

What vigorous protests the river-men made against the railroads and the bridges that followed them! The first bridge project came to nothing. As early as 1840 a wire suspension bridge was proposed. The engineer said he would "cross the great and violent river by the construction of a bridge on the principles of suspension," then little known in America. He said he would have three spans or arches, which would leave four hundred and forty-four feet of river to be filled by an embankment. The structure was to be twenty-seven feet wide, though this enormous width might be changed to thirty-six feet, "if ever the traffic shall be such as to call for the change." It was to be capable of bearing 1,675 tons, and there were to be ten cables, which could be cut to eight, if the estimated cost of $737,566 was thought excessive. It was declared that light cables would be safe "until the increase in population of the city would render the concentration of ten thousand individuals on one of its arches a much more probable event than it could now be regarded."

Fortunately that bridge was not built, but in 1869 the construction of the Eads Bridge was begun, and was continued in the face of organized opposition from those who made their living on the river. They claimed that the high chimneys of the steamboats could not pass under the bridge without being lowered, but the real reason was the fear that the bridge would affect the river trade.

At first, the opposition was not thought serious, but in 1873, when $6,000,000 had been spent on piers and arches, the Keokuk Packet Line complained to the Secretary of War that the bridge was an obstruction to commerce, and asked for its removal. A committee of

engineers was sent to St. Louis to inquire into the matter. Their report asked for the removal of the bridge, or the construction of a canal around the eastern end. The report was approved, and was filed for reference to Congress.

At this juncture the Bridge Company decided to appeal to President Grant. James B. Eads asked the President of the Company to go with him to Washington. This official doubted the wisdom of accompanying Mr. Eads, for he had been President of the Board of County Commissioners in 1859, when Ulysses S. Grant, then a resident of St. Louis, applied for the post of Superintendent of County Roads. He had been responsible for the failure to act favorably on the application. And Grant was the President to whom he was asked to go!

But the two men went on their mission. With anxiety one of them watched the President's face. He might have known that there was no reason for doubt as to his reception; Grant was not a man to harbor a grudge. The President greeted him with a smile of recognition. Embarrassed, the St. Louis man apologized for the failure of 1859, but he was relieved. "Oh, no! You see how much better it is than it might have been," was Grant's kindly comment.

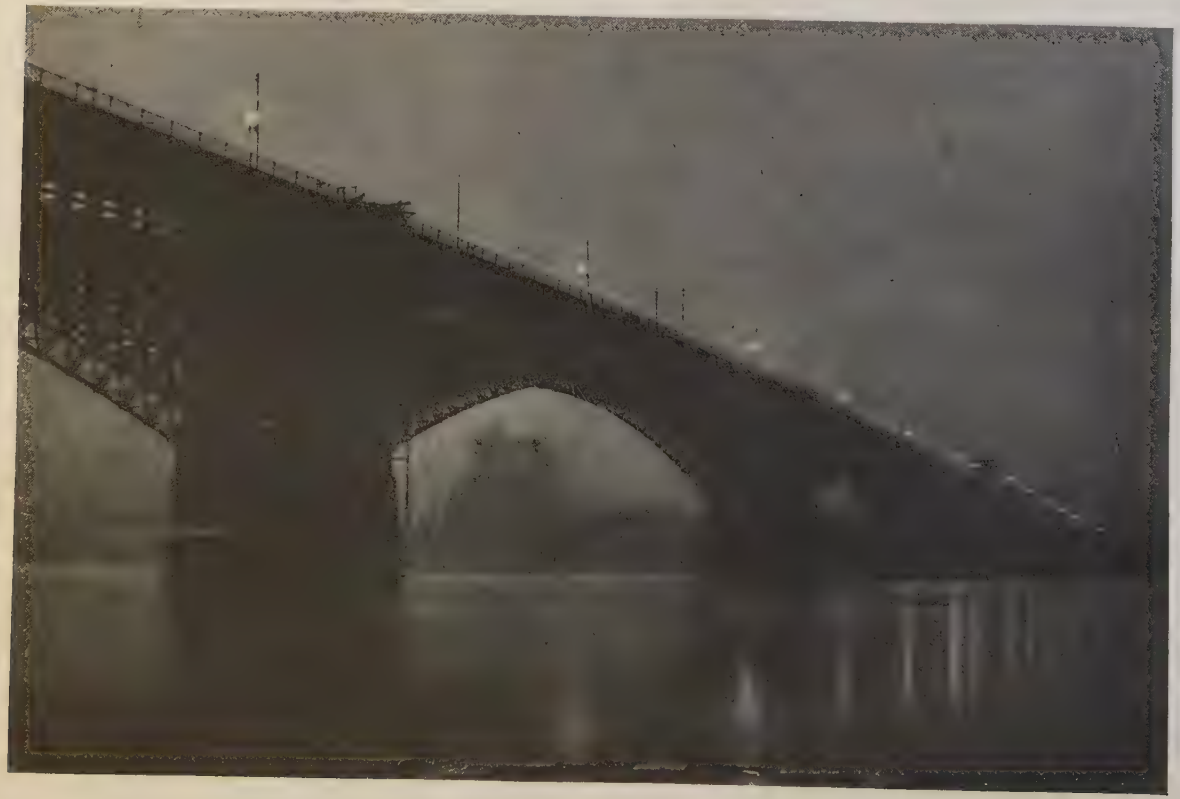
The President listened carefully to the appeal of the bridge men. He said he had never known of the Commission of Engineers, sent for official information, then said to the official who had approved the report for the removal of the bridge: "You certainly cannot remove the structure on your own judgment. If Congress wishes to order its removal, it would have to pay for it. It would hardly do that to save high smokestacks from

being lowered when passing under the bridge. I think you had better drop the case."

St. Louis thought her troubles were over when the Eads Bridge was completed. But soon there was a cry for relief from "The Bridge Monopoly." After many years the Merchants' Bridge was built. Then came the Electric Railway Bridge. Three structures did not put an end to difficulties, so finally the city built the free bridge. The McKinley Bridge required two years in the building, and cost $1,500,000; the city bridge took eight years and cost $8,000,000. For a long time it stood with completed spans over the water, waiting for a bond issue to pay for the approaches.

Now St. Louis has four bridges, but she is not content. Nor are the river-men pleased; they find what they call obstructions to navigation are heaping up unreasonably.

The City of the Bridges is better known as the Mound City, because of the great number of relics of the mound-builders on its site. Most of these mounds were destroyed in early days, but the largest remained until 1869, when it was removed during railroad construction. The east side of the river also boasted many mounds. Sixty-four of these, known as the Cahokia Mounds, on the site of an old Indian village, are still in existence, in the famous American Bottom, six miles east from St. Louis. The largest of all, the Monk's Mound, has been called the greatest known mass of earth built up by the labor of human hands. Fear has been expressed lest this priceless relic be destroyed before its treasures can be uncovered. But scientists have aroused public interest, which led in 1921 to the beginning of important excavations. Now it is the



EADS BRIDGE AT DAWN, ST. LOUIS, MISSOURI

MAGAZINE AT OLD FORT CHARTRES, ILLINOIS

A RIVER VISTA

hope that Illinois will purchase the property and preserve it as a State Park. The central feature of the proposed park is the great mound, which covers six acres, is ninety-seven feet high, and contains more than one million cubic yards of earth, most of it brought laboriously from the bluffs, three miles away, which bound the river valley on the east.

After the mound-builders and the Indians, the French came to the region of the mounds. There, in 1700, they founded a trading-post and a mission. Later the settlement became one of the large towns of the French in the valley; at one time there were from forty to fifty houses there, ruled by the Court House, built in 1716, which was taken to Chicago for the World's Fair, where it may still be seen, on the Wooded Island in Jackson Park. On July 6, 1778, the town was captured by George Rogers Clark without a struggle.

Thus romance and history combine to make memorable passage down the lower river. Opposite St. Louis Lewis and Clark camped all winter, and in the early spring of 1805 set out on the exploring trip up the Missouri and on to the Pacific Coast, for whose expense Congress had appropriated $2,500. Incidentally it may be said that there were those who objected to this as a gross waste of public funds!

The settlements of the French were scattered on both sides of the river, from St. Louis southward. At Carondelet, now a part of St. Louis, they had a trading-post which they called Vaide Poche, or The Empty Pocket. They may have made light of the town itself, but they appreciated the Meramec River, which enters the Mississippi at Carondelet, for even

then the winding stream was noted for its beauty, as it is to-day.

The French were attracted also to the east side of the Mississippi, where, for seventy-five miles, the valley is bounded by a narrow limestone ridge, from five to ten miles wide, rising as high as two hundred feet above the lowlands. The ridge is continuous except for the gaps, each about two miles wide, through which the Kaskaskia and the Big Muddy River flow to the Father of Waters.

In the country of the limestone ridge John Law's Company of the Indies in the year 1723 granted to Renault a bit of land "including the village and establishment of St. Philip's, of one league on the Mississippi, and two leagues back from thence." The town of Renault is there to-day, while close to it is another settlement begun by the early French, Prairie du Rocher.

Prairie du Rocher is the railroad station nearest to old Fort Chartres, the stronghold built in 1720, when Philippe François de Renault, Director General of mining operations, brought up the river two hundred white men and five hundred San Domingo negroes, thus introducing slavery on the territory of Illinois. It was designed to protect against the Spanish these servants of John Law's Company of the Indies, and thus was at the American heart of the great Scotch financier's visionary scheme—called later the Mississippi Bubble—to rehabilitate the finances of France, a scheme which brought dire disaster to the kingdom.

When Fort Chartres was built, it was "a musket shot" from the river. In 1756, when it was rebuilt, it was half a mile from the water. At that time France thought it worth while to expend $1,000,000 on the buildings. Those who go to the bluffs, four miles dis-

tant, may see the quarry from which came the stone for reconstructing what was long the French seat of government in Illinois. The British, too, wished to make much of it when it came into their possession, but the encroachments of the river forced them to abandon it in 1772.

To-day the changeable river has receded, and Illinois has made a State Park of the site, whose buildings are to be restored.

Quickly interest is transferred to the western bank, where Ste. Genevieve, the oldest settlement in Missouri, tells of the French founders and of later adventurers who made it a point of departure for the lead mines farther back in Missouri. Travellers have always been delighted with the massive bluffs that rise from two hundred to three hundred feet above the river, here, and to the south. One traveller of 1834 said, "They often seem to shoot up toward the heavens like the lofty battlements and pinnacles of an ancient city."

"For the next historical site you'll have to look to the bed of the river," said the captain of a packet to a passenger in the pilot-house. "Gone is the site of old Kaskaskia, where the Indians from the Illinois River settled soon after Philadelphia was founded, transferring the name of their old town; where the French set up their capital; where social gayety mingled with military glory; where there were once seven thousand people; where George Rogers Clark came in 1778 on his expedition from Virginia; where Lafayette stopped in 1825; where Lincoln attended court. Now the hungry waters of the Mississippi cover it. A few years ago a lone chimney still stood on the edge of the stream, but even that is gone."

In 1830 there were still about a thousand people in the doomed town, but gradually the river ate away the land, and the inhabitants removed to safer quarters. Finally, in 1881, the Mississippi cut behind the site, joined the Kaskaskia River to the left of the town, and made a considerable island between the old channel of the river and the new track of the water. These waters flow over the ground where Indians, French, English, and Americans trod together or in succession; a new town of the same name has grown up on the island, which, though west of the Mississippi, and connected by commercial interests with Missouri, is still a part of Illinois.

The Kaskaskia River is frequently called the Okaw, that name being a corruption of the phrase used by the French, who stated that they were going *aux Kau* (to Kaskaskia).

The bluffs opposite Okaw Landing, close to the site of old Kaskaskia, tower impressively. They prepare the eye for the heights of Chester, where the lower town is on the flood plain, while the upper town is on the heights. The steps to those heights may be difficult—but what a view of the valley there is above!

"Loth to leave Chester, are you?" the captain asked. "I know it is a town that tempts one to stay. But do not think there are not still more splendid landmarks. You'll come to Red Rock and Fountain Bluffs, to Cape Cinque Hommes and The Devil's Bakeoven, and to Tower Rock. Your eyes will be roving on all sides, you see."

Timothy Flint, a traveller of early days, marvelled at Tower Rock, which he described as "a noble and massive pyramid, rising precipitately out of the bed of

the river, and stated to be one hundred and fifty feet high."

In 1839 Colonel William Bowie Cowan grandiloquently told of his belief that Grand Tower, which is now a village on the river close to the Tower, was to become a great city, because, "on the whole length of the river, from the Falls of St. Anthony to the Balize, it is the only point that presents an impregnable barrier to the raging flood." Believing that Tower Rock, not far from the centre of the stream, "offers itself as one pillar of the bridge that is to connect the Egypt and the Ophir of the great valley," he received a charter for such a structure, and was eloquent in his declaration that it should be built, since that was "perhaps the most rich spot of country known in the world."

From Grand Tower to Cape Girardeau the wooded bluffs continue, though sometimes interrupted by gaps for streams or by a bit of bench laid along the stream. Past these, more than two hundred years ago, floated Ensign Girardeau, who had been at Kaskaskia from 1704 to 1720, making his way to the bluffs and the point that juts into the river, since known by his name, Cape Girardeau. There, in 1792, Louis Lorimier, fur-trader, settled. Americans followed, and were on hand when the country about the Cape was, in 1804, made one of the four districts of Upper Louisiana.

Noteworthy even on the Mississippi are the great bluffs at Thebes, and the rocky nose of Gray's Point, though these are almost the last of the heights that have bordered the Father of Waters for hundreds of miles. From Commerce, more than thirty miles above the mouth of the Ohio, there is nothing but a broad alluvial plain, for Commerce is at the rim of the ancient bed of

the ocean that has been gradually pushed back through the ages of which geology tells.

Where the Ohio joins the Mississippi the elevation is but two hundred and sixty-eight feet above the sea. This low country seemed of so little use to Gouverneur Morris that he advocated giving up the mouth of the Mississippi to Spain. "What good will it do us?" he asked.

Down below Cairo a few miles, Belmont tells of the day when General Grant, after severe conflict, succeeded in taking the town from the Confederates. The location is so low that the inhabitants of the region frequently have to flee ten miles back into the interior to Pin Hook Ridge, a peculiar, sandy elevation which extends for a distance of five or six miles. Those who find refuge there are following in the steps of ancient people who have left reminders of their occupancy.

This is the region of the levees which protect the towns and the agricultural lowlands in time of high water. Foreigners who visit the country are astounded at nothing more than the great system of levees by which the low-lying farms on the banks of the Mississippi are protected from overflow. When the river is low they are a little skeptical as to the need of these great banks of earth, and they are tempted to pity those who live in their shadow. But when they pass along the mighty stream in flood-time and see that the surging waters are many feet higher than the country homes, or when they see a city like Cairo entirely surrounded by levees, they change their minds and wonder at the enterprise that has succeeded in placing the protecting chain in the most exposed places.

The levees are usually built of clay or loam, though sometimes sand or even re-enforced concrete are used. The amount of material required may be imagined from the statement that the best levees are at least eight feet wide at the crown, while at the bottom they are three times as wide as they are high.

Those who, in days of rain or flood, have watched a boat landing freight on one of the alluvial banks where the levees thrive will appreciate the term "mud clerk" as given to the second clerk who checks the incoming and outgoing freight, no matter what the weather may be. Of all the picturesque names on the river, none is more truly descriptive than this—not even "L'Ainse de la Graisse," the name given by the French fur-traders to Bayou St. John, where New Madrid was settled in 1786; it was "the cove of fat," because there they found plenty of bear's grease, as well as the robes of the animal.

Three years later Colonel George Morgan, having received a concession from Spain, laid out, on a most ambitious scale, the town of New Madrid, about a mile below the site of the present town. His ambition to build up a great city, where he would rule at the head of an empire, was frustrated by General James Wilkinson, who thought of Morgan as a rival in his scheme of inciting a rebellion against the United States in the country west of the Alleghenies. So he succeeded in persuading the Governor of New Orleans to block Morgan's plan.

For a season New Madrid prospered. It was the meeting-place for boats from the Ohio, the Wabash, the Tennessee, and the Cumberland, bound for New Orleans. Timothy Flint wrote in 1816 that he had

seen one hundred boats gathered at the mouth of the Bayou. "I have strolled to the point on a spring evening," he said, "and seen them arriving in fleets. The boisterous gaiety, the moving pictures of life on board, the numerous animals, large and small, which they carry, the different loads, the evidences of the increasing agriculture of the country above, the immense distances from which they have already come, and those to which they have still to go, afforded me copious source of meditation."

Twenty years later a gazetteer published in St. Louis declared that "nothing seems to prevent New Madrid from being among the largest towns in Missouri but the washing or caving in of the banks."

Yet both the visit of Timothy Flint and the statement made in St. Louis came years after New Madrid's great disaster, which is still spoken of with bated breath in that country. In 1811 there were repeated shocks of earthquake, which would have been numbered among the most destructive of modern times if there had been enough people in the region. Lakes were formed, great cracks in the earth appeared, the river changed its channel, islands were made, while others disappeared, and the whole countryside was in terror.

But to-day New Madrid sits serenely by the waterside, only a short distance above the southern boundary of Missouri, watching the occasional steamers go by, just as, in the days when it was the centre of one of the districts of Upper Louisiana, it gave welcome to flatboats, keelboats, and arks of the hardy pioneers who braved the perils of these waters in their search for fortune or for a home.

CHAPTER XIV

DOWN THE WINDING OHIO

"BE sure to come on board by ten o'clock to-night!"

The voice of the captain of the *B. D. Wood* boomed the welcome warning over the telephone. He explained that the November rains had brought the anticipated "tow-boat stage," and that the fleet of waiting steamers with their barges would go out that night.

"There's a cabin for you if you get here in time," was the final assurance of the man who was eager to take his place in the grand rush of the tow-boats from Pittsburgh to the lower Ohio.

The boat was still at the dock when the fortunate guest sought his berth. Anticipation of a delightful week kept him awake while he thought of the succession of those who had preceded him down *La Belle Rivière*—Indians in their canoes, paddling from shore to island, or from bend to bend; venturesome explorers, both French and Colonials, but mostly French, military men like George Washington, to whom the waters of the Ohio became almost as familiar as those of his own Potomac; daring leaders of colonies that carved a place for themselves amid the green forests, hundreds of miles from neighbors; traders and emigrants who made their way on barges or keelboats or flatboats, consulting the curious pages of *The Pittsburgh Navigator* as they faced the perils of an unknown stream, keeping a wary eye on the banks for Indians who might prove enemies

and bad white men who were sure to be enemies, bolstering up their courage, perhaps, as they sang:

"O, the river is up, the channel is deep,
The wind blows steady and strong,
A-splashing their oars the mariners keep,
As they row their boats along.
(Tenor) Down the River,
(Bass) Down the River,
(Ensemble) Down the O-Hi-O!"

Long before morning the tow-boat had swung out into the stream, followed by its double file of heavily burdened barges, bearers of train-loads of coal from the mines up the Monongahela, and was on its way down the river, guarded by government dams and locks, past the tributary waters that added their quota to the tawny flood, ready to make precarious dashes between the piers of bridges where numberless barges had spilled their coal on the bottom; to negotiate bends where the pilot's ability to avoid piling up his trailing cargo on the banks seemed almost uncanny; to steam along the edge of Columbiana County, Ohio, renowned because there, in 1863, a period was put to the thousand-mile dash of General John H. Morgan and his raiders from south of the river; to sweep majestically by East Liverpool, as famous for its potteries as are Arnold Bennett's English Five Towns; to dash through the fitful glare from the steel furnaces at Steubenville and Martin's Ferry; to trace again the final leagues of the journey of the brave men and women from Massachusetts who, in 1788, followed General Rufus Putnam to the new settlement which was finally named Marietta, for Marie Antoinette of France, though it was at first proposed to call it Adelphia.

MARIETTA, OHIO

The site of Marietta was chosen because there, three years before, Fort Harmar had been erected to defend the north side of the river from settlers from the south side. At that time there were one hundred thousand people in what is now West Virginia and Kentucky. The north side was still the Indian side, and settlers were warned off. But many of the men from the south side insisted on going over and taking up lands according to the Virginia system of squatting on unappropriated territory. Congress had decided that, when the Indian lands to the north of the river should be thrown open to settlement, the New England system of surveys must be in operation.

Yet before the building of Fort Harmar enough settlers had forced their way across the Ohio to call a convention to frame a constitution for a new state, polls to be opened at the mouth of the Miami, the Scioto, the Muskingum, and, farther north, in what is now Belmont County. Those who prepared the notice of the election declared that "anyone had a right to pass into vacant country, and to make a constitution, and that Congress could not forbid them or drive them out or deprive them of their lands."

But the defiance of Congress was answered by Fort Harmar, which was soon to welcome those who came in an orderly manner to settle on a part of the tract of 1,500,000 acres between the Scioto and the Muskingum Rivers, which had been contracted for at sixty-six and two-thirds cents an acre.

The modern visitor cannot wonder at the delight of those who, after their long journey from New England, looked on the hills that cluster about the junction of the Muskingum and the Ohio. To-day, as then, the bend in

the river adds to the pleasure of those whose eyes linger on this Western Plymouth, with the venerable twin-towered church, relic of the early days of the settlement; the house of General Putnam, preserved for posterity by the Daughters of the American Revolution; the Sacra Via, the Capitoline, and the Tiber Way, reminders of the classical leanings of the founders; the old land office of the Ohio Company and the Old Block House, with its interesting relics; the Mound Cemetery, celebrated because it contains, so it is claimed, the graves of more military officers than any other cemetery in the United States, as well as for the presence within its limits of one of the best-preserved relics of the mound-builders.

When, in 1811, Elias Pym Fordham, an English traveller, paused at Marietta "on the Muskingham," he noted in his journal that it was a town of one hundred and twenty houses, and as large as Wheeling. "The town is laid out on rather a large scale, which will not be filled up for a century or more," was his judgment. "The streets are now green lanes, bounded by worm fences. Where houses ought to be, there are now groves or gardens."

Groves and gardens and green lawns still add to the attractiveness of the town that grew up on the site of Fort Harmar, but the houses have filled up the vacant spaces where the fair town of the revolutionary heroes rules the great bend at the mouth of the Muskingum.

Once Marietta was a boat-building centre of note. Perhaps the most famous patrons of the infant town's industry were Aaron Burr and his dupe, Harmon Blennerhassett, who sought boats to carry down the

stream their expedition against Mexico. The patriotic citizens of the river town became suspicious, and the arrest of Burr soon followed, as well as the confiscation of the boats and stores. Blennerhassett fled, deserting his marvellously beautiful home on Blennerhassett Island, near Belpre, at the lower end of Marietta's majestic river bend.

The traveller who has been saddened by the sight of the island that will always be thought of in connection with treason soon is exhilarated as he approaches Hockingport, at the mouth of the Hocking River, for it is recorded that there Washington camped when on his expedition against the Indians, in company with Lord Dunmore, Governor of Virginia. Then it was on the same spot that officers of Fort Gower, on October 5, 1774, having received word of the First Continental Congress at Philadelphia, assembled to make a declaration both of loyalty to Great Britain and of their purpose to dedicate their lives to the cause of American freedom.

From the Hocking River the journey continues between green banks where hill and forest and pasture hold the eye, and around enticing bends that make West Virginia and Ohio interlocking neighbors. This is the country of the Scioto Company, whose lands reverted to Congress when the company failed to pay the purchase price agreed on. Thus four thousand square miles became known as Congress Lands.

But before the Scioto Company was ready to acknowledge its inability to pay for the princely realm for which they had contracted, it made an ill-starred effort to form a colony. In 1788, the year when Marietta was so successfully settled from New England, Joel

Barton was sent to France to lure discontented men and women to what was declared to be a paradise on the Ohio. The prospector told of "a climate wholesome and delightful, frost even in winter almost entirely unknown, a river called, by way of eminence, the beautiful, and abounding in excellent fish of a vast size, noble forests, consisting of trees that spontaneously produced sugar, and a plant that yields ready-made candles; venison in plenty, the pursuit of which is uninterrupted by wolves, foxes, lions, or tigers; no taxes to pay; no military service to be performed."

More than five hundred people swallowed the bait, and agreed to go to the Ohio, there to work three years for the Company, their pay to be, for each head of a family, fifty acres, a house, and a cow. They landed at Alexandria, Virginia, but were delayed there more than a year by reports of Indian uprisings and other difficulties. When they finally reached the country of their dreams, they found a village of log cabins near the mouth of the Great Kanawha, where they speedily proved their unfitness for prairie life. And how could success be expected? For the men were not ready for primitive conditions; they were "carvers and gilders to the king, coachmakers, peruke makers," all fitted for life in a city, where civilization was old, and real hardship was unknown.

To make matters worse, the Scioto Company was unable to make good their promises of land, and the Frenchmen were stranded. Congress tried to give them a measure of relief by voting for them twenty thousand acres between the mouth of the Sandy and the Scioto. To this land thirty families moved, but there, also, the attempt was doomed to failure. Gradually the dis-

appointed people disappeared. To-day practically the only reminder of them is Gallipolis, "the city of the French," in Gallia County, which takes its name from the ancient title of France. Even in 1807, when F. A. Michaux passed by, he found but sixty log houses, mostly uninhabited and falling to pieces, the remainder occupied by Frenchmen "who breathe out a miserable existence." In 1817 Fordham spoke of the town as "Galliopagus."

Picturesque Portsmouth, at the mouth of the Scioto, dates from 1803, when the survivors of the Frenchmen were still struggling to maintain a foothold. Long before that date, however, the site was inhabited, for it was a favorite dwelling-place of the Shawnees. One of their best fortifications was there.

In fact, most of the country to the north of the river has its relics of Indian days. The valleys of the Muskingum, the Scioto, and the Little Miami were especially favored by the mysterious mound-builders. The Serpent Mound, said to be the finest structure not only of the ten thousand mounds of Ohio, but in the entire country as well, is in Adams County, on a limestone cliff above the Brush Creek, perhaps thirty miles from the Scioto. This is more than thirteen hundred feet long. The body of the serpent is coiled. The jaws are distended to accommodate an egg-shaped figure, which is more than one hundred feet long, and sixty feet wide.

The Serpent Mound is in the heart of what, in the days of the pioneers, was known as The Virginia Military District, six thousand square miles between the Scioto and the Little Miami Rivers, reserved for

Virginia in 1784 when she yielded her claim to the Illinois Country. Portions were presented to Virginia officers who had served in the Revolution, when the Secretary of War certified that they were entitled to the grants.

Beyond the Military District was the Symmes Purchase, where John Cleves Symmes and his associates made ambitious plans. Their million acres stretched from the Little Miami River to the Great Miami River. Three settlements were made on the river; Columbia (now a part of Cincinnati), at the mouth of the Little Miami, and North Bend, Indiana, were long rivals of the third town, Losantiville. But when Fort Washington was built at Losantiville, and when the seat of the Northwest Territory was taken there in 1790, the rivals had to make way for "the city opposite the mouth of the Licking," the meaning of the name, strangely formed from Greek, Latin, and French, given to the unresisting infant settlement by John Filson, who, with Matthias Denman and Robert Patterson, laid out the town in 1788, only two months after Marietta was settled.

Fortunately the name of the Queen City of the Ohio Valley was changed to Cincinnati. And just as fortunately the fame of the giver of the discarded name—who lost his life soon afterward while exploring the woods between the Miamis—has been preserved by William H. Venable, in a series of twenty-two stanzas like the following:

> John Filson was a pedagogue—
> A pioneer was he;
> I know not what his nation was,
> Nor what his pedigree.

DOWN THE WINDING OHIO

Tradition's scanty records tell
  But little of the man,
Save that he to the frontier came
  In immigration's van.

John Filson and companions bold
  A frontier village planned,
In forest wild, on sloping hills,
  By fair Ohio's strand.

John Filson from three languages
  With pedant skill did frame
The novel word Losantiville,
  To be the new town's name.

Said Filson: "Comrades, hear my words:
  Ere three score years have flown,
Our town will be a city vast."
  Loud laughed Bob Patterson.

Still John exclaimed with prophet tongue,
  "A city fair and proud,
The Queen of Cities of the West."
  Matt Denman laughed aloud.

Deep in the wild and solemn woods,
  Unknown to white man's track,
John Filson went, one autumn day,
  But nevermore came back.

The Indian, with instinctive hate,
  In him a herald saw
Of coming hosts of pioneers,
  The friends of light and law;

The spoiler of the hunting ground,
  The plower of the sod,
The builder of the Christian school,
  And of the house of God.

And so the vengeful tomahawk
  John Filson's blood did spill—
The spirit of the pedagogue
  No tomahawk could kill.

The rain and sun of many years
  Have worn his bones away,
And what he vaguely prophesied
  We realize to-day.

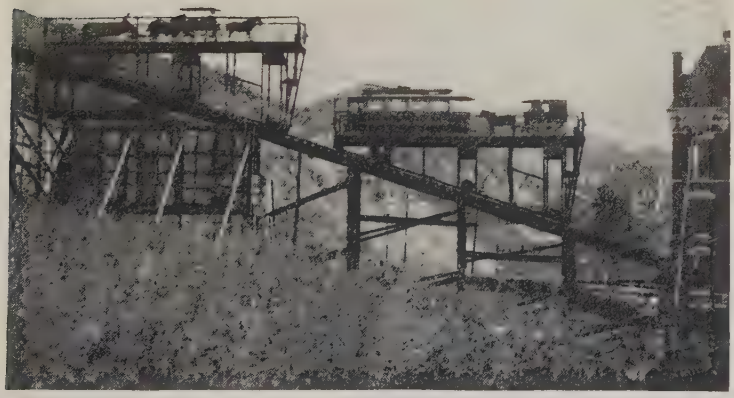
Losantiville, the prophet's word,
  The poet's hope fulfils,—
She is a stately Queen to-day
  Amid her royal hills.

"Amid her royal hills" was well said. For Cincinnati rules the valley from hills that are steep and picturesque, looking down on fairly level ground where great business buildings crowd. Some of the hills are made easy of access by inclined planes. Others are climbed by streets which afford astounding views of the surrounding country.

Hill and valley have furnished a problem and an opportunity to the wise planners of city parks and parkways. Ravines that once seemed to be obstacles have been made to minister to the beauty of the surroundings. When the comprehensive park program is carried out, Cincinnati will have recreation areas gloriously different from those of other American cities.

The hills—some of them nine hundred feet above the sea, and nearly five hundred feet above the river—give unusual charm to the residence section. Within the city limits and in the suburban area are communities, each on its own hill or hills, or in the valleys, where so many of the homes have grounds that are small parks. Even the names of these areas are inviting—Mount Auburn, Walnut Hills, Mount Adams, Norwood, Brighton, Avondale! Look down from the heights occupied by some of those upon the sweeping composite curves of the Ohio, and across to the neighbor hills of Covington and Newport. Then admire Filson, the pedagogue, for his wisdom in choosing a site for his town, and agree with Charles Dickens, who, in his "American Notes," which aroused the ire of many, pleased Cincinnati people by saying, "I have not often seen a place that commended itself so favorably and pleasantly to a stranger at the first glance, as Cincinnati."

LOG RAFT ON THE OHIO RIVER, NEAR CINCINNATI



AN INCLINED PLANE AT CINCINNATI, OHIO

Once it was Cincinnati's ambition to be a seaport. In 1801 a brig set out bravely from the water-front, bound for the West Indies. Later attempts were made to provide a highway from New Orleans to New York, by river and canal to Toledo, thence by Lake Erie and the Erie Canal to New York. Even in 1830 the hustling young city thought there could be no better fortune for her than the success of this dream. But the day of other dreams came. So many of these led to achievements that Cincinnati was soon looked upon as one of the most progressive of western cities.

The Queen City has always been famous likewise for culture. Students of its history smile at the reason given by Alexander Wilson, the ornithologist, who visited the city in 1810, for thinking the inhabitants "a very thoughtful people: so many of them, when asked to subscribe to the great work on birds which he planned, told him that they 'would think about it.' "

Nine years later, the stranded John J. Audubon, that other ornithologist who did much of his best work in the Ohio Valley, found employment at a Cincinnati museum, in stuffing birds which later found place in the city's college.

In 1834 a visitor to Cincinnati spoke admiringly of the fact that the city "is imitating the example of Boston, in establishing free schools for the whole people." This program for free schools was soon developed in accordance with the code of the State of Ohio, the only state which expressly declares that cities within its bounds may establish municipal universities and levy a special tax for the purpose.

One of the local institutions that led to the development of the Cincinnati University was the Astro

nomical Society, which, early in 1830, had among its members twenty-five physicians, thirty-three lawyers, thirty-nine wholesale grocers, fifteen retail grocers, five ministers, sixteen pork merchants, twenty-three carpenters and joiners. At least this is the list given in surprise by an early French traveller. No wonder that, in 1843, the Society was able to persuade John Quincy Adams to take steamer from Pittsburgh to Cincinnati to open the new observatory!

Cincinnati rejoices in the fact that Henry Ward Beecher received his final training for the ministry in Lane Seminary, of which his father, Lyman Beecher, was president. His first pastorate was just over the state line in Indiana, at Lawrenceburg, a village on the Ohio. There, on a salary of three hundred dollars, he brought his bride from New York City and made a home for her in two rooms, over a stable, for which he paid forty dollars a year. The pine furniture was second-hand, and much of the clothing of both husband and wife was given to them by friends.

When the eloquent minister finally decided to accept the thrice-repeated call to Indianapolis, the journey led him to Madison by way of Switzerland County, whose chief town, Vevay, was settled by Swiss grape-growers because they thought the hills on the Ohio offered choice locations for vineyards. From Vevay to Madison the trip has always been one of great loveliness. At Madison the young minister and his wife proceeded to Indianapolis on the first train to use the tracks of the new railroad to Vernon, twenty miles distant.

Like Lawrenceburg, Vevay, Madison's neighbor up the river, has its memory of a famous citizen; Edward Eggleston, author of "The Hoosier Schoolmaster,"

was born there. George Cary Eggleston, in the delightful life of his brother, tells how together they used to chase fireflies on the banks of the Ohio, and relates experiences while attending a loud school, where the diligence of the pupils was judged by the noise they made as they studied.

The Eggleston boys liked to go down to Madison, the beautiful city on a great bend of the river, which boasts many notable drives, not only along the river, but also back into the hills. Among these perhaps the finest leads to Hanover, where one of the oldest colleges in Indiana is seated on the bluffs above the river. Those who wish to study the enthusiasm of the average alumnus of Hanover College have only to ask for a description of the scene from the heights.

In this favored section the state has set apart for the people an area of about four hundred acres, calling it Clifty Falls State Park. This area, located but a short distance from Madison, and only about one hundred yards from the river, is the gift of Jefferson County to the Commonwealth. Of the many beauty-spots in the park the outstanding marvel is Clifty Falls, ninety feet high, together with a series of smaller cascades. Thick woods and deep, dark gorges combine with the cascade to justify enthusiasts who call the region "The Switzerland of Indiana."

This section of the river, between Cincinnati and Louisville, is perhaps better known to travellers than any other by reason of the speedy packets that connect the two cities. It would be difficult to find in the entire country a short section of river that combines history and picturesqueness in like manner. And both reach a climax as the down-river limit of the journey is ap-

proached. In 1778, when George Rogers Clark was about to lead his brave men to wrest the Illinois country from the control of the French and the English, he paused for the winter at Coon Island, near the lower limit of Clark County, which was later named for the venturesome patriot. Once this island was nearly a mile long, but the destruction of the timber facilitated its washing away by the river. In 1840 but seventy acres remained. Later it vanished entirely.

Not far away, on the Ohio shore, General Clark lived until his death after his victorious return from the Vincennes campaign. Grateful Virginia gave to him and his men one hundred and forty-nine thousand acres, on one thousand of which the town Clarksville was to be located. Curiously the town, chartered by Virginia in foreign territory, remained under the jurisdiction of that state until 1852, when the charter was annulled by Indiana's General Assembly, a local document being substituted for it. The Virginia parchment was dated in 1786.

Jeffersonville, on a terrace above the river, has absorbed Clarksville, as it tried to appropriate for its own the Falls of the Ohio. In 1824 Indiana appointed two commissioners to locate a canal around the Falls, of course on the Indiana side, the purpose being to give Indiana a river-port at this all-important spot. Naturally there was opposition from Louisville. A dam was built, and the water was diverted. But the dam was cut. And in 1830 its successor was completed on the Kentucky side, the United States Government being interested in the company to the extent of $233,500. The high tolls charged led to much complant and great profits; in twelve years the Government's stock earned $258,378 in dividends. Since 1874, when the Govern-

ment secured control of the canal, conditions have been vastly improved.

One of the two commissioners appointed by Indiana for the attempt to be first in improving navigation at the Falls was Christopher Harrison, hermit, whose long residence on the picturesque bluffs above the river gave him local fame. Born in Maryland, he sought the Ohio country when the girl who had promised to marry him gave her hand to Jerome Bonaparte, later the King of Westphalia. Another of the ex-hermit's attempts to do business for the state was more of a success. He was one of the commissioners to lay out Indianapolis, destined for the capital of Indiana.

New Albany, Jeffersonville's twin city down the river, sympathized with its neighbor in coveting the traffic around the Falls. In 1813 the founders pinned their faith to their chosen location, because it was their conviction that "the world would one day revolve round New Albany." To-day the little city treasures the house of the men who made the prophecy; it has been marked by the Daughters of the American Revolution. Another landmark is the old tavern where Daniel Webster, Andrew Jackson, Henry Clay, and General William Henry Harrison were guests when on their way to the west.

New Albany marks the departure from the river of the Silver Hills, which approach the city from the west. After a wide circuit they draw near to the Ohio once more near Madison. There is an Indian legend of silver mines in the hills, but none of these have ever been discovered by the white men. In early days a traveller who stood on the summit of one of these hills, near New Albany, spoke of "the wide expanse of country, the sparkling 'Belle Rivière' visible above and

below the city, the Falls, with their never-ceasing musical roar; the fields, covered with bountiful harvests; the range of Silver Hills, towering from four hundred to six hundred feet in grandeur and beauty; in one direction Jeffersonville, named for the great Virginian, and laid out according to his plan; in the other, New Albany, most charming city."

From New Albany to Evansville almost every reach in the river has its vital association with history. Near Cannelton, down in Perry County, close to the river-brink, is a spring from which Lafayette drank when he spent the night at the home of a pioneer, while on his way up the Ohio in 1826, the steamboat on which he was a passenger having been wrecked five miles east of Cannelton. In Spencer County Abraham Lincoln spent part of his boyhood, after crossing the river from Kentucky. Later he acted as ferryman over Anderson Creek, which enters the Ohio at Troy. One day a traveller appealed to him to row him across the river. Thinking only of doing the stranger a service, he ferried him to Kentucky, thereby unwittingly infringing on the rights of the man who had the rights of ferriage from Indiana to the Blue Grass State. As a result he made his first appearance in court, to answer the charges made against him. Before removing to Illinois, he ventured on the Ohio several times, bound for New Orleans with a flatboat cargo of produce from his inland home near the modern village of Lincolnville, where the Nancy Hanks Park marks the burial-place of Lincoln's mother.

When navigation on the Ohio River was at its height, Evansville, some distance below the haunts of Lincoln, was an important port. It is still a centre of attraction to travellers on the river, but its modern development

has not been due so much to its location on the Ohio as to the fact that it is the metropolis of an important section. It was long notable as a city without a park, but recently it has made up for lost time; Garvin Park, with its woodland, its lake formed by a dam across a ravine, and its remarkable scenic beauty, would make any city notable.

As the river approaches Illinois the banks of the Ohio become less rugged until, at Shawneetown, below the entrance of the Wabash, the stream is normally above the street level of the town that was laid out in 1808, and named for the Shawnee Indians who used to go there on their way to the salt works, twelve miles distant, at Saline Mines, not far from the river.

The town, which had twenty-five log cabins by the end of its first year, grew rapidly. It was an important river-point—one of the old boating songs popular among river-men had as the closing line of the refrain, "All the way to Shawneetown"—on the trade routes from the South to Central Illinois and St. Louis, and the land-office for the southeast district of Illinois was there. The salt works, which were on Government reservation until the admission of Illinois as a state, added to the vigor of the community, for these were long the source of supply for settlers in Southern Illinois, Southern Indiana, and parts of Ohio, Kentucky, and Missouri. The product was frequently 150,000 bushels a year, but by 1820 the output had grown to 300,000 bushels, which brought seventy-five cents a bushel.

In 1818, when the salt reservation reverted to the state, William Tell Harris wrote of the town's unfortunate location:

"From the situation of Shawneetown its inhabitants might be supposed to partake of the nature of the wild duck, for every year they expect to be driven by the waters to their upper stories, as high land enough to avoid this is not to be found within a mile of the place; the consequent unhealthiness of such a spot is apparent in the sallow complexion of those who here deprive themselves of many comforts and risk both life and health for the sake of gain."

In 1834 Shawneetown was the largest town in the state, in spite of the periodical floods. To-day it is a thriving small town, but it still suffers from the river, which threatens disaster when there is a breach in the levee that rises like a wall before the houses on the water-front.

Some time after Shawneetown has been left behind appears the bold crag known as Cave-in-Rock, named for the cavern from which, in the early days of the nineteenth century, outlaws dashed down on unsuspecting pioneers and tradesmen, plundering their boats and often taking their lives.

The final sinuous curves of the river are among scenes varied and beautiful. Golconda's name is fitting, if the reference is to the glorious scenery about it. One of its charms is that it is close to the beginning of the long, graceful curve that extends down between the mouth of the Cumberland River and the Tennessee River, taking a bite out of Kentucky that helps to make symmetrical the southern boundary of Illinois. The metropolis rejoices in its pleasant situation on the upward swing of the great curve, in the possession of the remains of Fort Massac, built on the site of the French trading-fort of 1702, as well as of the State Park which

ON THE OHIO RIVER
Looking South from the Campus of Hanover College, Indiana

THE LEVEE WALL AT CAIRO, ILLINOIS
In Process of Building

THE HARBOR AT CAIRO, ILLINOIS
Illinois Central Railroad Bridge in the Distance

commemorates the fact; and it is proud of the fact that George Rogers Clark crossed the river near by when on his way to Kaskaskia.

Then comes the great curve that approaches some of the richest forest lands of the state to the north, marking the last majestic sweep of the beautiful river before it marries the Mississippi at Cairo.

At Cairo is the entrance to the Southland. It is the land of levees, of filled lots, of seep water, of devastating floods, of a passenger ferry that offers to day excursionists the vastly exciting experience of visiting three states within a few minutes.

The name of Charles Dickens became anathema to Cairo people of early days by his telling of his arrival "at a spot so much more desolate than any we had yet beheld that the forlornest places we had passed were, in comparison, full of interest."

Those words are worth quoting if only to contrast the Cairo of to-day with that of the great novelist's prejudiced picture. Floods have been conquered by levees; disease has been robbed of much of its power by sanitation; the level of the land has been raised by laborious and expensive filling; comfortable homes, attractive business buildings, and busy factories rest in security behind the levees; railroads have shown their faith in the community by making large investments there. As a result Cairo may not be able to claim beauty of surroundings, though there is much of attraction there; but, by reason of industry, enterprise, determination, courage, and faith, the city is worthy of its place at the end of the river that has borne explorers and pioneers on its bosom, and is still a mighty feature in the industrial life of the nation.

CHAPTER XV

AMID THE MARVELS OF ILLINOIS

CLAIMED by the Spanish, occupied by the French, conquered successively by the English and the Americans: this is a brief statement of the wonderful history of Illinois. The story of the American occupation may be told with like brevity: made a county of Virginia in 1778; ceded by Virginia to the nation in 1784; a part of the Northwest Territory in 1787, and of Indiana Territory in 1800; organized in 1807 as Illinois Territory, bounded on the north by Canada; finally made a state in 1818. But what romance lies back of the facts so quickly stated!

For Illinois romance began early, when Marquette and Joliet and LaSalle and Tonti and Allouez and Hennepin came down from the north and found entrance to the waters that led to the Mississippi from Lake Michigan either by way of the Desplaines River, or by way of the St. Joseph River and the Kaskaskia River to the Illinois River. Other adventurers went from Lake Erie by way of the Maumee River to the Wabash River, and then skirted the eastern border of what was to be Illinois. Among those first-comers were the Frenchmen who founded the post at Vincennes on the Wabash, holding it until the British took control there. And at length the British had to yield possession to the doughty George Rogers Clark, whose heroic band marched from the Ohio to the Mississippi, then across the waste—much of it a watery waste—to the Wabash. The record of their progress through the

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WABASH RIVER, MT. CARMEL, ILLINOIS
From the Bluff

Copyright by Robert Ridgway

NEAR TUNNEL HILL, JOHNSON COUNTY, ILLINOIS
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flood-waters that stretched for many miles west of the Wabash is an epic that belongs first to Illinois, then to the nation.

Other early visitors saw under more favorable conditions the country through which Clark passed. Fifteen years after his progress to the Wabash, a Frenchman said: "The Province of the Illinois is, perhaps, the only spot respecting which travellers have given no exaggerated account. It is superior to any description which has been made for local beauty, fertility, climate, and the means of every kind which nature has lavished upon it for the facility of commerce."

Followed many Frenchmen who agreed that his description of the prairie country of Illinois was not overdrawn. One of these, Elias Pym Fordham, Englishman, laid out Albion, now the county-seat of Edwards County, Illinois, and wrote to friends at home that they should come to the Long Prairie and the Bompas Prairie, where both beauty and fertility awaited them.

Albion soon found neighbors—for instance, Mt. Carmel, the town on the bluffs overlooking the tree-embowered Wabash from which, in the days of overflow, it is easy to gain an idea of the difficulties George Rogers Clark had to overcome; and Olney, to the northwest, where Dr. Robert Ridgway, the ornithologist, has set apart, in Bird Haven, both a refuge for the birds and a perennial museum of the Wabash Valley trees, considered by competent authorities to be "the most remarkable aggregation of trees in the North Temperate Zone."

Between Olney and the Wabash River, and then north for a short distance, the very limited oil region

of Illinois is marked by the unmistakable derricks and storage tanks, while still farther north the landscape is dotted by some of the state's hundreds of soft coal mines which are found in half of the one hundred and two counties. For ten per cent. of the coal mined in the United States comes from Illinois—and the United States has more coal than all the rest of the world! Sometimes, as near Danville, the coal is so close to the surface that it is only necessary to remove a bit of earth before stripping the coal as from an open quarry. Open coal mines like these may be seen on the three branches of the Vermilion River which come together in and near Danville, flowing in decided depressions that give variety to the boundless prairie. These tree-bordered valleys are beauty-spots to-day, as they were in the days of the Indians, who used to hunt on the site of Danville, coming there over the narrow paths that led from all points, like the spokes of a wheel.

Westward the prairie stretches toward the Mississippi, crossed by innumerable highways that are as accurately placed as the sides of the squares on a checkerboard, marked every few miles by a railroad crossing, leading to grain-elevator villages, or to more ambitious towns built about a central square with its county court-house, the shrine to which the surrounding stores and churches seem to be paying homage.

The prairie extends northward to Lake Michigan, on whose shore Chicago has its seat. That this City of Superlatives belongs to Illinois rather than to Wisconsin is due, in part at least, to the delegate from Illinois in Congress who was instrumental in having the boundaries of the proposed new state so amended as to include sixty miles of the shore of Lake Michigan,

including the site of Chicago as well as the coveted lead mines of Galena.

One of the earliest visitors to the vicinity of Chicago was Allouez, who, in 1670, told of an attack by the Iroquois on Indians resident "at the foot of the Lake of the Illinoues, which is called Michiganing." In 1673 Joliet spoke of the "Portage of Checagau." Marquette spent the winter of 1674-1675 "two leagues up the river," because enemies prevented his continuing the journey to the Illinois. The Franquelin map of 1684 gave the name of the river as Che-ke-gon. There, it is said, LaSalle had a stockade as early as 1683, while in 1698 the French established a mission at the mouth of the river. In 1803 Fort Dearborn was built on the banks of the stream, and was occupied until August 4, 1812, when the Indians, from their hiding-places among the sand-dunes, rushed out on the soldiers and their families and killed them. The fort was rebuilt in 1816, and was occupied in various ways until 1857, but it has been removed, and the site marked by a tablet on the building close to the south approach to the Rush Street bridge.

Nine years after the massacre three thousand Indians, gathered by the riverside, sold to the Government five million acres of land in Michigan and Illinois, including the site of Chicago, for five thousand dollars! The first houses were built in 1833, and the same year an optimistic citizen, after watching the erection of the government pier, said: "If the pier now building should be a permanent one, and the harbor become a safe one, Chicago will undoubtedly grow as rapidly as any of the western villages."

To-day the visitor to this growing village is de-

posited on the edge of the contracted Loop District, the business center of a city of three million people—so named because the elevated roads from the South Side, the West Side, and the North Side run a merry race around the four sides as they transfer their passengers. Down below the streets are so crowded by the cheerful residents and their friends that it has been necessary to build subways to relieve the congestion of business traffic.

Sometimes visitors, attracted by the crowds and the great business establishments, forget to go beyond the eastern boundary of the Loop to Michigan Avenue. Thus they fail to see what is, in the opinion of many, one of Chicago's most stupendous spectacles—a boulevard where the automobiles throng as on Fifth Avenue, New York City. On one side are many squares of great buildings whose varied façades are an artistic study, while on the eastern side is Grant Park—"the frontispiece to Chicago." It leads to the lake, as it was won from the lake. This open space is the site of the Art Institute, among other beautifying features which carry out the thoughts of Daniel H. Burnham, the artistic dreamer, to whom so many of America's cities owe a debt greater than can be told.

To the north of the Loop is another sight that should not be missed—South Water Street, where fruits and vegetables and poultry are sent by tens of thousands of farms for distribution to the city's millions. There is nothing anywhere just like this outdoor-indoor market.

Within the Loop the cross streets are named for the early Presidents, while the north and south streets are named for various reasons. Dearborn Street tells of the pioneer fort, while Clark Street is the monument to

ON MICHIGAN AVENUE, CHICAGO, ILLINOIS

LIFT-BRIDGE, CHICAGO RIVER

the brave George Rogers Clark, who won the Northwest. This statement would be questioned by a countryman in Scotland to whom the author once talked. "You know Chicago? Then you know my street," he said, simply. "I have a brother out there of whom the people think so much that they wished to name a street after him. He is modest, though, and he asked them to name the street for his brother in Scotland. That's me—Sammy Clark. He says they have my name on the lamp-posts—S. Clark Street. You've been on my street, haven't you?"

Most of the streets of the Loop District cross the river, either on the north or the west, on one of the numerous bridges that add variety to life for the man who is rushing to keep an engagement. In summer, when he is a square or two away he is almost sure to hear the clang, clang of the bell on the bridge that tells of the stealthy approach of the tiny tug that has in tow a great leviathan of the lakes, carrying ore, or grain, or lumber. And before he can reach the dingy structure the traffic has paused, the bridge has begun to move, and he is river-bound. Down below is the little tug, while straining at the hawser is the freighter which reaches back perhaps under the lifted bascule bridge a square distant, while the bridge two squares away has just been restored to traffic.

The tale of Chicago for the sightseer is long. He comes away with visions of wonderful boulevards like the Lake Shore Drive, and of parks—five thousand acres of them—in all sections of the city, from Lincoln Park on the North Side to Jackson Park on the South Side, transformed by the genius of the planners of the World's Columbian Exposition of 1893. From Jackson Park to Washington Park leads the old Midway, amuse-

ment avenue of the World's Fair, which is in process of being beautified according to the plan of Lorado Taft. His Fountain of Time at the west end of the avenue is an artistic triumph.

But parks do not satisfy Chicago. The city wanted Forest Reserves and she has them. The eighteen thousand acres at first provided are only a start—the wise leaders of the people have their eye on fifty thousand acres of woodland which will provide marvellous recreative opportunities for the city's millions.

It is like Chicago to want more parks and more Forest Reserves, for she wants more of everything good she has, and she proposes to get it. Not satisfied with the harbor afforded by the Chicago River and its branches, she has a second harbor, to the south, Calumet River, over the line in Indiana, which is used by more than half of the tonnage that feeds the city's commerce. Nor has she been content with a single railroad belt line to intersect all the roads entering the city and facilitate transfers of cars and whole trainloads without coming into the city. There are now fourteen hundred miles of track in the various belt lines—one-third of the belt line mileage of the United States. The Outer Belt Line runs from Waukegan, thirty-five miles north, on the lake, just above the Great Lakes Training Station, down to Joliet of the steel mills, and on to Gary, the wonder steel city of Indiana. A trip over this outer line, through the generous outskirts of Chicago, across the numerous railroads that are the city's arteries, gives a splendid finishing touch to the study of the greatness of the city that in fifty years has risen from the ashes of the most disastrous fire in modern history.

The hunger for improved travel facilities for the Chicago region dates far back of the first settlement of the city. The French explorers, noting that in time of flood the waters of Lake Michigan passed over the brief portage to the headwaters of the Desplaines River, began to dream of an artificial waterway to the Mississippi, usable at all seasons. In 1673 Joliet spoke of the possibility of cutting a canal half a league long from the Lake of Illinois to a tributary of the St. Louis River, his name for the Desplaines. In 1808 Albert Gallatin proposed to Congress a ship canal across the same portage. But not until 1858 was the Illinois and Michigan Canal, one hundred miles long, opened by the state from the South Branch of the Chicago River to the Illinois River at Peru and La Salle. The cost was only $6,500,000, yet the estimate was made in 1885 that this primitive structure had saved the people of the state $180,000,000 in freight charges.

In 1900 Chicago completed her task of paralleling the first twenty-eight miles of the canal by the Drainage Canal, which was to carry the city's waste to the Desplaines and the Illinois. Incidentally, this waterway gives an opportunity, unknown to most vacation-seekers, for a leisurely, intimate journey into the heart of Illinois. A delightful book, "*The Log of the Easy Way,*" has been written by a Chicago newspaper man who bought a house-boat for one hundred dollars—this was many years ago!—and went along the canal in the wake of a towing steamer, on his honeymoon trip, so making suddenly a state that had been to him "only a government and a map" his estate and birthright. Travellers by the several railroads may pass along its banks through what geologists know as the

Chicago Outlet, a broad, deep valley, eroded by the escaping waters of Lake Chicago, the placid lake that was the ancestor of Lake Michigan. Although the new canal is large enough for the passage of great lake freighters, there is practically no traffic, though there is an income from the great water-power developed at the Lockport terminus.

Chicago dreams of the day when the Drainage Canal will be an important link in the Lakes-to-the-Gulf sixteen-foot waterway in which it is hoped to accommodate enormous traffic.

The Illinois and Michigan Canal reaches the Illinois River at a point on the east and west stretch of the stream, in fertile LaSalle county. Even in the days of the Indians the valley there was remarkable for its productiveness, and there were along the stream many Indian villages.

In 1679 LaSalle wondered at the many habitations—empty then, because the Indians were absent on their fall hunting expedition. He wondered also at Buffalo Rock, which towers above the river on the right. With him was Tonti, "the Man with the Iron Hand."

Below Buffalo Rock, the explorer found the site of modern Utica. There—at the Indian town Kaskaskia, predecessor of the settlement of the same name on the Mississippi River—Marquette conducted the Mission of the Immaculate Conception.

But the vicinity of Utica is more famous because of the towering Starved Rock—at first known as the Rock of St. Louis—the lofty, precipitous, tree-clad eminence overlooking the river and the modern town, that has been compared to the rocks on which stand Stirling Castle and Edinburgh Castle. This was a famous

STARVED ROCK AND ILLINOIS RIVER
From Lover's Leap

ILLINOIS RIVER VALLEY, NEAR PEORIA, ILLINOIS
From Grand View Drive

Indian stronghold; from it radiated native trails in many directions. There, in 1682, LaSalle began the building of a palisaded fort that was to be the centre of the western fur trade and of the French power in the Mississippi Valley.

But evil days followed LaSalle; he was recalled to France on charges of disloyalty. In his absence the Iroquois laid siege to the Rock in 1683, but were compelled to withdraw. In 1684 Tonti became commander of this farthest frontier of French power. There he waited in vain for the return of his leader, who had lost his life during an expedition to the region bordering on the Gulf of Mexico. There he welcomed the survivors of the ill-fated party, and later dealt with the savages, until, in 1698, came the order from the King of France that the Rock, together with other outposts on the lakes and beyond, be abandoned. The story of those fourteen years in the fortress in the wilderness is one of the glorious romances of American history.

Not until 1769 did the eminence receive the name it now bears. Then Pontiac, Ottawa's chieftain, was killed by an Indian. In revenge the Ottawas and the Pottawattomies vowed to exterminate the Illinois. At length they succeeded in destroying all but a few of the doomed savages. These fled for refuge to the Rock where LaSalle and Tonti had ruled. For a time the Illinois succeeded in keeping their enemies at bay, but the day came when the watchful besiegers, discovering the thongs by which they raised water from the river, made impossible the securing of further supplies. But the heroes would not yield. Finally all were dead, and their bones were found, long afterward, on the summit of Starved Rock.

By act of the Illinois Legislature nine hundred acres, including the Rock, have been set apart as one of the numerous State Parks reserved for the people. For five miles along the river the reservation extends, including canyons, waterfalls, glens, and rock formations innumerable. There visitors are welcomed cordially to Illinois' best.

Beyond Starved Rock LaSalle and Peru, the twin cities, built on picturesque hillsides, afford easy access to numerous great sandstone cliffs, verdure-clad, which are characteristic of this whole region. And just beyond the river sweeps to the southward, through some of the most fertile lands in Illinois, until it widens into Peoria Lake, a body of water eighteen miles long, almost without current, studded by islands, surrounded by cliffs some of which rise from one to two hundred feet high, and by farm lands that are the wonder of a state famed for its rich soil. Somewhere in the vicinity of the lake was the site of LaSalle's Fort Créve Cœur, the Fort of the Broken Heart, which told of his sorrow for many disasters, including the tragic loss of the *Griffin*, first vessel on the Great Lakes.

The lake is really two, separated by a strait. On this strait, in 1765, there was a prosperous trading town named Le Pé, which was later transferred to the present site of Peoria, the city that became the great railroad centre of the section because of the advantageous crossing to its site along the terrace by the river and up the pleasant bluffs.

For the remainder of the two hundred and seventy-eight miles of the river's course from the Desplaines to the Mississippi it flows through historic country, past

COURT HOUSE SQUARE, PEORIA, ILLINOIS

THE SITE OF OLD FORT DIXON ON ROCK RIVER, ILLINOIS

curious mounds and other relics of the days when this was a favorite highway of the Indians.

Along the stream are towns beautiful for situation, and near by are inland towns and cities known to fame. Capital of a county bordering on the river is Jacksonville, where the first college building, erected in 1829, is still in use. Once it was said of the town, "If you see them building anything in Jacksonville, you may know it is either a church or a schoolhouse."

In the next county is Springfield, capital of the state, and so successor of Kaskaskia and Vandalia. Springfield takes pride in its Capitol building, but its chief pride is that it was from there the nation called Abraham Lincoln to the President's chair. The Lincoln homestead and the Lincoln monument are visible memorials of the great President whose early life made this entire region famous. At Old Salem, on the Sangamon River—the stream that Lincoln when a candidate for the Legislature promised to have made navigable—the state has set aside a park to mark the place where the rail-splitter kept store. At Lincoln, near the headwaters of the Sangamon, is preserved the old building in which Lincoln the lawyer pleaded more than once. At Decatur, in the next county, a tablet in Lincoln Square marks the spot where, in 1830, the youth Abraham paused beside his ox-wagon when on the way from Indiana to his first home in Illinois. In Alton, to the south, was held one of the series of Lincoln-Douglas debates.

The Illinois River country was familiar ground to Lincoln. In 1832, at the head of the company which had chosen him captain, he went up the valley to Rock River, where the men were to give help in the conflict

with Black Hawk. The company had no part in the conflict, but they were once close to Oregon, the town where Lorado Taft has erected, on a sightly bluff, the gigantic concrete figure of Black Hawk that is looked on as one of the marvels of the sculptor's art.

At Oregon, after leaving his company, which had been disbanded—though the Captain re-enlisted—he was within thirty miles of Freeport, which, twenty-nine years later, was chosen for the northern limit of the historic debating tour with Stephen A. Douglas, as Jonesboro was the southern limit.

Jonesboro is far down toward Cairo, in that most attractive portion of Southern Illinois called Egypt, the land of strawberries and apples and peaches, of green hills and winding roads, of monumental rocks and streams that stir the blood of those who follow their windings back into the secret valleys. Here, in the land of the Ozark extension into Illinois, there is perennial delight for those who find their pleasure in going where nature is generous with her varied gifts.

In the upper portion of the rather indefinitely bounded Egypt the slopes of the Ozark Plateau are far from pronounced; the change from the seemingly endless stretch of level prairies to the hills is almost imperceptible. At first there is here and there a gentle dip in the surface, then a more pronounced slope, down, up again, like a dimple in the rounded cheek of a babe; then an actual hill where, in winter, a boy will deign to coast for lack of something better; then a few real hills of the sort that make the weary farmer groan as he toils homeward at the close of the long summer afternoon; finally summits and valleys crowding so close together that there is a vast difference between an air-line dis-

THE STATE CAPITOL, SPRINGFIELD, ILLINOIS

tance connecting two points and the road that clings to the variations of the surface. Now come the rocky glens of Makanda, the inviting precipices of the Alto Pass region, and finally the eminences that make the location of Anna and Jonesboro so satisfying—the chain of hills that separate the plateau from the fertile overflow lands of the Mississippi Bottoms.

Through these bounding hills the roads which seek the river make their way by cuts like that in Dug Hill, in Union County. This particular cut has filled with awe thousands of boys to whose inexperience it seemed an engineering triumph. But when they ventured farther from home, and saw the passage cut for the railroad through Tunnel Hill, in Johnson County—where the Ozark Ridge is crossed by the longest tunnel in Illinois—they are prepared for the marvels of other states. As the years pass, while they may be compelled to own that these outside wonders are notable, they are apt to insist, however illogically, that nothing can be compared to the scenic glories of the Egypt country.

And those who go as strangers to the country of the Ozark Plateau will not find it a difficult matter to understand their loyal enthusiasm.

CHAPTER XVI

IN BEAUTIFUL INDIANA

LET the traveller enter Indiana at almost any point, and he will find himself in the midst of scenes which make irresistible appeal to the artist and the poet, as well as to the man or woman who would smile at the idea of having anything of the artist or the poet in his nature.

And everywhere history and romance join forces with nature in enforcing the state's invitation to linger within her borders. This is especially true if the entrance is on the northeast, in the vicinity of Fort Wayne, where the St. Mary's River, after a circuitous course, and the meandering St. Joseph branch unite to form the Maumee River, the stream which gave access for the omnipresent French explorers to the Wabash.

Fort Wayne is distinguished by being on the site of a fort built by Mad Anthony Wayne after his campaign against the Indians, and prominent in the War of 1812. At one time the fort's defenders were warned of the activities of Tecumseh by William Suttonfield, after a daring ride, through Indiana, up the Maumee River. Another distinction is that the city is the burial-place of Johnny Appleseed, the kindly man who planted and tended apple seedlings in the path of the pioneers.

Excursions north and west of Fort Wayne lead into Indiana's lake region, where are hundreds of lakes, of which the largest is Lake Wawasee, while the best known is Lake Maxinkuckee.

South of Fort Wayne are streams that wander with delightful abandon, sometimes through fertile fields, again beneath crags, or through remnants of forests. Then there are highways like that from Richmond to Indianapolis, which tell of the days of the National Road as it leads to Greenfield, birthplace of James Whitcomb Riley, and to spots made famous by some of his poems. A bit below Richmond there is the road to Liberty, which at one point is close to the boulder that marks the birthplace of Joaquin Miller. Still farther south, from Lawrenceburg, Madison, and New Albany, on the Ohio River, picturesque roads reach out to Indianapolis. The road from Lawrenceburg passes through Greensburg, whose tree growing in the court-house tower helped to give fame to the town; the road from Madison gives access to the Vinegar Mills State Park, along the beautiful Muscatatuck, with its waterfalls and its stone gorge; and the road from New Albany lingers at Salem, birthplace of John Hay, which in 1863 was visited by General Morgan's raiders from Kentucky.

A second delightful road from New Albany ambles through hill and valley to Corydon, whose citizens proudly point to the elm-tree under which the constitution of the state was drawn up, and the old stone building which, from 1813 to 1825, was successively the Capitol of Indiana Territory and Indiana State. The visitor to the sleepy town finds pleasure in recalling that its name was given by Governor William Henry Harrison. After the streets had been laid out, he was guest at a home where his host's daughter sang the lament for the young shepherd, Corydon. "Why not call your town Corydon?" the General asked.

It is twelve miles from Corydon to Wyandotte Cave, the series of limestone passages that, next to Mammoth Cave, make what has been called the largest cavern in the United States. From its entrance, more than two hundred feet above the Big Blue River, there are thirteen miles of galleries and halls.

And only a short distance north is Marengo Cave, known to scientists—who have been the chief visitors to its splendors—as the most beautiful limestone cavern in the country!

That the gloriously beautiful country from the region of the Marengo Cave down to the Ohio, thence to the mouth of the Wabash, and up to the mouth of the White, known as The Pocket, was a favorite territory in the days of the pioneers, is not a surprise to those who, fascinated by the varied scenery, follow in the steps of the men and women who helped to make the nation's history.

For many years these pioneers were active on the waters of the Wabash, which was navigable for keelboats, bateaux, and flatboats, far into the northern part of the state. The fleet was large and the movement of the products of the fertile state was considerable.

A favorite stopping-place of the early boatmen was New Harmony, then known as Harmonia, in Posey County, founded by the Rappites, in 1817. There they had a notable community life, cultivated the fields, planted vineyards, conducted woolen mills, and built stone houses so sturdy that some of them are occupied to-day.

George Rapp, the founder, became dissatisfied, and, in 1825, Robert Owen and William Maclure paid $150,000 for the property. In New Harmony, as they

ENTRANCE TO DONALDSON CAVE, MITCHELL, INDIANA

VANDERBURG COUNTY COURT HOUSE, EVANSVILLE, INDIANA

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renamed the town, they proposed to have a socialistic community, founded on the principle of universal education, freedom of conscience, and the equality of labor and capital.

When Proprietor Maclure came to view his property, he was commander of the keelboat *Philanthropist,* built for him at Pittsburgh. With him were so many educated people that, later on, the cargo of the keelboat was referred to as "The Boatload of Knowledge."

While the career of Robert Owen there was brief, his sons, Robert Dale Owen and William Owen, with Maclure, emphasized the educational aim of the community, until scientists from all over the country, and even from Europe, were attracted to it as to a famous university. In a few years "that little village, deep-set in the darkest part of Indiana's wilderness, developed into the most important source of scientific knowledge in America." During this period David Dale Owen, appointed United States Geologist, was commissioned to survey the territory now included in Missouri, Iowa, Minnesota, and a part of Illinois.

Up the Wabash from New Harmony, another historic community tells of heroic days that antedate the coming of the famous scientists. Vincennes was a trading-post in 1727, a French settlement in 1735, the goal of George Rogers Clark in 1778, and the home of William Henry Harrison, Governor of the Northwest Territory, in 1789. The mansion in which he lived has been preserved by the action of the Vincennes Chapter of the Daughters of the American Revolution, which is named for François Vigo, the Spanish resident of St. Louis and Kaskaskia who persisted in his allegiance to George Rogers Clark in the face of grave difficulties.

But the importance of the Vincennes country dates even back of the French. The mound-builders were there, and the Indians followed them; the region about the pleasing junction of the White and the Wabash was one of their favorite hunting-grounds. The Piankashaws—whose name is still given to a great bend on the Wabash—had a village near the site of Vincennes. In going to the Falls of the Ohio (Louisville) they used a trace made by the buffalo. This buffalo trace became the first stage-road from Louisville to Vincennes.

Another Indian village was located on the site of Bloomington, about half-way between Vincennes and Indianapolis. The first settlers, attracted to The New Purchase of 1818, between the branches of the White River, made Bloomington their chief settlement. (By the way, there is no more informing or readable story of pioneer life than the portly volume, The New Purchase, by Baynard Rush Hall. The history given by him of the early days of the State University at Bloomington is captivating. For instance, he tells of the opening, when the Principal congratulated the students on being first in an institution that "may eventually rise to the level of eastern colleges"—a prophecy that has been fulfilled.)

Monroe County, of which Bloomington is county-seat, is further glorified by the fact that a few miles east of Bloomington is the point fixed by the census of 1910 as the centre of population in the United States.

For thirty years the centre of population has had a fondness for Indiana; in 1920 it was just over the line in Owen County, a few miles south of McCormick's Creek Canyon State Park, where cascades and rocky bluffs make notable the two miles of the stream included in the park. McCormick's Creek empties into the

west branch of the White River. The course of the parent stream is pleasant, frequently even picturesque, on to its source. One of the choice sites along the stream, at the junction with Falls Creek, was chosen in 1821 by those who laid out Indianapolis, Corydon's successor as capital city. The first plot provided for a city a mile square. A visitor from Virginia in 1840 spoke of this as "a ridiculously large plot, it would seem, even to so thriving a population." Then he added graciously, "But many prophesy that it will eventually fill the entire space."

The ten men from as many counties who chose this site thought of calling the place Tecumseh or Sumerah. They were assisted in laying out the town by Alexander Robertson, who had helped to lay out Washington. Naturally, then, the plan was made for streets radiating from a central plaza, Governor's Square, with Governor's Circle at its heart. There, at first, was the house of the Governor, but to-day it is the site of the imposing Soldiers' and Sailors' Monument, two hundred and sixty-eight feet high, admired by all who know the city.

From Indianapolis as a centre, highways lead in a dozen directions. One goes to Kokomo, where gas was found in 1885, thirteen years before the gas-fields of Indiana became the greatest in the world, and long before the later great oil development. Another road passes close to Fort Benjamin Harrison and the famous Indian mounds at Anderson. Notable also is the extension of the National Road westward to Terre Haute, which, close to Plainfield, passes the Van Buren elm. There, it is said, a stage-driver upset Van Buren in the mud because he had vetoed a measure for highway improvement.

Brazil, one of the chief centres of the state's coal-mine industry, is close to Terre Haute, which, in early days, was a port of note on the Wabash River. In 1836 eight hundred steamboats reached that point. The people of Terre Haute tell visitors many stories of these early days. They speak of a captive of the Indians who had grown from babyhood while in their charge. She was returned to her relatives in Pennsylvania, but her Indian lover succeeded in bringing her back to the banks of the Wabash, where she planted the seeds of an apple brought from home. In time an apple-orchard grew there, and its site—close to the bridge across the Wabash, in the heart of Terre Haute—is still called The Old Indian Orchard.

Like Vincennes, Terre Haute has its legend of François Vigo. When he died he left to the town a legacy to buy a bell for the Vigo County Court House. Payment was to be made from the proceeds of a claim for eight thousand dollars which he lent to George Rogers Clark in 1778. He died in poverty, after hoping in vain for payment which was not made for nearly fifty years. Then a bell was purchased according to the donor's wish, and it was used to call the children to school.

Within easy reach of Terre Haute is one of the parks the state has set aside for the people. In the county to the north Turkey Run State Park includes a bit of wilderness that surrounds the canyon at the junction of Sugar Creek and Turkey Run. Sugar-trees and tulip-trees abound, beech-trees and walnut-trees are everywhere, and wild flowers and ferns grow luxuriantly. Rocks and hollows, stretches of clean sand, reaches of still water and bits of stream where the water is in tumult, combine to make memorable the bit

SOLDIERS' AND SAILORS' MONUMENT IN THE CIRCLE, INDIANAPOLIS

NEAR NASHVILLE, BROWN COUNTY, INDIANA

of permanent wilderness that was saved by prompt action from the rapacity of those who planned to destroy its beauty for the sake of the timber—men who were merely following in the steps of thousands of others who have destroyed timber so luxuriant that Elias Pym Fordham said in 1817, "It is seldom that a view of two hundred yards in extent can be caught in Indiana, because of clustering forests which, to our English eyes, seem of great size and grandeur."

Not far from Turkey Run Park, and on the same Sugar Creek, though in Montgomery County, is another region that should be made a State Park—The Shades, where cliff and waterfall and a massive natural bridge more than three hundred feet long and one hundred feet above the ravine, attract visitors, especially from Crawfordsville, the college town which possesses a memorial to General Lew Wallace.

The waters of Sugar Creek at length find their way into the Wabash, the stream that in 1811 marked the passage of General Harrison and his seven hundred men to the village of the Prophet, brother of Tecumseh, near the mouth of the Tippecanoe, where they were victorious over savages who tried to surprise them. The site of the battle is marked near the river-bank, to the north of Lafayette.

Although Tecumseh was an enemy of the settlers, his nephew, Captain Logan, was their friend. And he has a monument perhaps thirty miles from the battle-field, in Logansport, which, in the days of its infancy, was to be named by the man who fired at a mark the four best shots in seven. All agreed that "port" was to be a part of the name, since they thought the Wabash a navigable stream. The winner decided that the name of the friendly Indian should be linked with "port."

To-day the city is popularly known in Indiana as Logan, in spite of the fact that, in 1834, the merchants of the town succeeded in persuading the captain of a small steamboat to ascend the stream, on the promise of a prize. The boat stuck on successive sandbars and was brought to Logansport after it had been drawn by oxen from its last lodging-place!

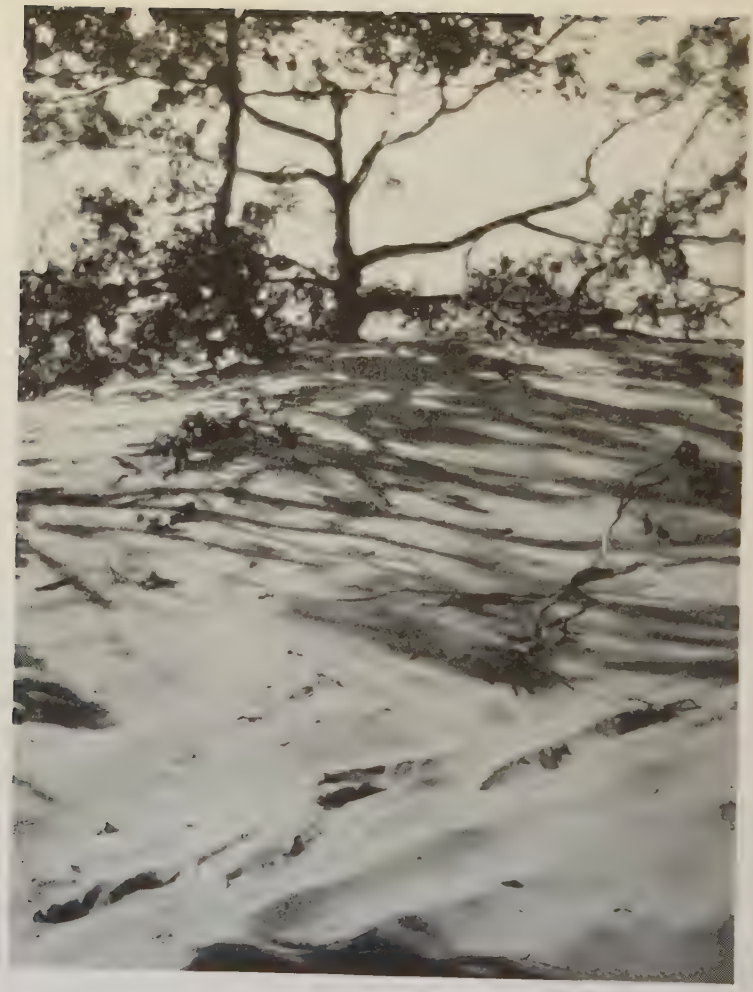
Perhaps fifty miles to the north of Logansport is a stream that is also famous among lovers of beauty—the Kankakee River, centre of the marshes which once were famous for hunting and fishing. Much of the region has been drained, but there are still bits of fascinating wilderness.

But most famous—and to many the most fascinating—of the natural wonders of Indiana is the country of the sand-dunes, a region perhaps twenty miles long that extends for a distance of a mile or more back from the shores of Lake Michigan to the east of the wonder steel town of Gary, the town that has been built amid the dunes since 1906.

The sand-dunes—some of them from one hundred to two hundred feet high—have been built up of the deposits left by the terminal moraines of the glacial period, which ground to powder the granite mountains of the north. The winds shift them ceaselessly, overwhelming trees and other vegetation. These moving dunes are called "live dunes." Sometimes the dunes are anchored by the unconquerable sand-reed until vegetation covers them, and they are still; then they are known as "dead dunes."

Botanists make pilgrimages to the dunes for the sake of the rare vegetation. There are scrub-pines like those in the Mackenzie Valley of Northern Canada, as

THE SAND DUNES OF LAKE MICHIGAN, IN INDIANA
Gnarled Poplars above the Lake



SUN AND SHADOW ON TOP OF A SAND DUNE ON THE SHORE OF LAKE MICHIGAN

well as harebells that thrive in the same region. There are other growths that are familiar to students of the Atlantic beaches, and there is the prickly pear cactus like that of Arizona. Water-lilies are in the ponds, the bogs are gay with orchids, while pitcher-plants and sundews are plentiful. There are alders and willows, and even poplars and white pines, where as many as three hundred varieties of winged creatures have been counted.

For years there has been talk of making this last remainder of the dune region along the south shore of Lake Michigan a National Park. First, however, it may be necessary for Indiana to acquire the needful territory and to give it to the Government. But however the area is protected, it is the ardent hope of those who know the dunes that they will be saved from destruction.

To the east of the country of the sand-dunes some of the most historic territory in Indiana calls for permanent memorials. At La Porte, the Door Village, a boulder marks the site of the block-house built in 1832, during the Black Hawk War. And at South Bend a museum preserves relics of early days. But the oldest relic in the neighborhood of this city is the five-mile portage from the St. Joseph River to the headwaters of the Kankakee, which gave the Indians and the French access from Lake Michigan to the Mississippi. In 1680 LaSalle and his men made use of this portage. The explorer of many vast wilderness regions left his party, and became lost! Next morning he was found in an Indian hut. A red cedar tree, on the banks of the St. Joseph, blazed by LaSalle himself, tells the story of his passage into Indiana the Beautiful.

CHAPTER XVII

FOLLOWING THE RIVERS OF OHIO

WHEN Manasseh Cutler, the Marietta pioneer, wrote his description of Ohio in 1787, he declared that "no part of the federal territory unites so many advantages, in point of health, fertility, variety of productions, and foreign intercourse, as that tract which stretches from the Muskingum to the Scioto and the Great Miami rivers."

Naturally the eyes of the pioneers were fixed on the rivers of the Buckeye State—so named thereafter by reason of the plentiful supply of buckeye-trees along the banks of these streams—for in early days these furnished necessary transportation. During the youth of the state attention was still on these, for it was felt that their utilization by means of canals would solve many problems for years to come. The great size of the canal program can be appreciated by the traveller who notes the relics of canal days along the Scioto, the Great Miami, the Maumee, and the Muskingum rivers, and he will be able to interpret the words of a statesman who made light of the task of digging "a ditch forty feet wide, four deep, and three hundred and seventy-five miles long."

To-day, however, the chief functions of Ohio rivers are drainage—and beauty. Only those can know their reserves of beauty who, leaving the railroad and its temptations, plunge boldly in and follow their devious ways. Almost anywhere such wanderers go they will be rewarded by glimpses not only of pastoral loveliness,

THE MOUND AT MARIETTA, OHIO

AN OHIO OIL WELL

but of tangled wilderness that will render easy the make-believe that they are back in the days of the hardy men and women who hastened to the territory that was founded on a promise of freedom to all.

If the traveller goes up the Muskingum from Marietta, he will find the eighty miles to Zanesville a serial story of nature's lavish attractions. As he passes along the high banks he will be interested in remembering that as a youth John Sherman was a rodman in a corps of engineers busy in canal-building along this river; as he wonders at the curious rock formations here and there on the bluffs, enthusiasm will be quickened as he recalls the fact that Morgan's raiders had to search along the banks for a good fording-place.

Should the ascent be continued as far as Zanesville—the city built on a part of the land given by Congress in 1796 to Ebenezer Zane, because he built a road from Wheeling, Virginia, to Limestone, Kentucky—he will come to the mouth of the Licking, close to the city. This stream passes through a narrow channel between cliffs, to which cling legends of the days of the Indians.

The spell of the primitive will be on the traveller even when he reaches Newark, for he will be told that, between the creeks that unite there, are relics of the mound-builders, whose favorite stamping-ground was this Ohio country, where the rivers seem to be in a conspiracy with the hills to make a landscape that is irresistible.

Another mound may be seen by those who go on to Granville, the college town on Raccoon Creek—a typical New England town, named for a village in Massachusetts by the one hundred and seventy-six people

who made the forty-six-day overland journey to the Ohio wilderness after organizing a church and taking their pastor with them. The college campus, the Sugar Loaf Hill with its broad lookout, the old cemetery which dates from 1805, and the rambling, tree-embowered streets all go to the make-up of one of the typical educational towns of Ohio, which boasts that it has a college for every thousand square miles of its area.

After the excursion up the Licking and beyond, to Newark and Granville, there should be a return to Zanesville, where the National Road crosses the river, then up to Coshocton, where the stream called by the Indians Walhondling unites with the Tuscarawas to form the Muskingum. In the days of the pioneers the Walhondling was called White Woman's River, in honor of a captive from the east who lived on its banks. She became the first wife of a chief. When the second wife was brought to the wigwam she called her the Newcomer. Later, when the second wife had killed her husband, she sought to escape, but was pursued and caught at a spot now included within the limits of Newcomerstown.

Newcomerstown is but a few miles southwest of the site of Gnadenhütten, where a monument tells the sorrowful tale of the ninety Christian Indians of the Moravian mission settlement who were massacred in 1782.

If the traveller's chosen path is along the Maumee River in the northwestern part of the state, he will find flatlands that will enable him to appreciate the historian's statement that the pioneers found it necessary to have a road a mile wide in that region—"for better a mile wide than a mile deep." He will find the re-

minders of old Fort Meigs—its site now a state park—built by General Harrison in 1813, on a grassy plateau opposite the village of Maumee. He will note the rapids, just above the site, and farther on will find a great rocky point in the stream which the early French explorers called the Roche de Bout. There he can enjoy the legend of an Indian boy who fell over the Bout to the flat rock below. The angry father threw the mother over after him; the inhuman act led to intertribal warfare on the spot, and many others were thrown to their death in the same manner. It has been said that the discovery of many bones on the flat seems to bear out the story.

Not far from the rock, at Presque Isle, Mad Anthony Wayne fought and won the battle of Fallen Timbers on August 20, 1794, and so brought to a successful conclusion his efforts to pacify the Indians who objected to the settlement of the country north of the Ohio. A few miles up-stream the visitor will come to Girty Island, where the people of Napoleon like to go for picnics, and where James Girty traded with the Indians in 1795. At Defiance, where Wayne built Fort Defiance in 1792, he will be gratified by the view of the junction of the Tiffin and Auglaise Rivers with the Maumee, within the city limits. He will see an island where the Indians once planted corn, now a city park. He will agree with the proud claims of those who know the country intimately that for quiet pastoral scenery the Maumee River near Defiance is notable. When he goes several miles east, he will be amazed at the pronounced Water Gap, where, on the north, the bank rises one hundred feet high, though on the south the incline is gradual for a mile. And when he wanders back down the river he will have

gained knowledge that will enable him to appreciate the words of Pierre Jean de Bonnechamps, companion of the leaden-plate-laying Celeron, who wrote, in 1749: "The Rivière des Miami (Maumee) caused us no less embarrassment than the Rivière de la Roche (the Miami of the Ohio) had done. At almost every instant we were stopped by the beds of flat stone, over which it was necessary to drag our pirogues by main force. I will say, however, that at intervals we found beautiful reaches of smooth water, but they were few and short. In the last six leagues the river is broad and deep and seems to herald the grandeur of the lake into which it discharges its waters."

Under ordinary circumstances the wanderer by the Miami of the Ohio will think that the Frenchman's memory of the difficulties of that stream must have been a little overdrawn, though even then he will find bits that would seem to bear him out. As he pursues his way up stream he will not find it easy to realize that the great waters can become a devastating torrent, though he will have evidence of the fact in the tremendous Conservancy District project in which the people of the Miami Valley joined forces so that there might never again be a repetition of the disastrous flood of 1913 that brought sorrow to bustling Hamilton and beautiful Dayton and scores of towns and villages above and below. The work done is greater than any engineering task accomplished in America since the building of the Panama Canal. But how it has paid in bringing a feeling of security to the thousands who dwell in the valley country along the Miami!

By works like this modern dwellers in Ohio have taken their place by the side of the mound-builders of

THE ART MUSEUM AND THE ART ACADEMY, CINCINNATI, OHIO

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long ago, who—their civilization considered—did as big a thing in building earthworks like the great conical mound at Miamisburg, below Dayton, as their successors in these days have accomplished. Those who climb this eminence and enjoy the view from the top can only think with wonder of the many similar constructions along the river-courses in Ohio, like Fort Ancient in Warren County, or the Serpent Mound in Adams County.

But the great centre of interest along the Great Miami must ever be Dayton, the city that was once a rival of Cleveland, and still has a proud position among Ohio municipalities. Her citizens pride themselves, and justly, on the beauty of the wide streets and parkways, and the delightful surroundings in the valleys of the Mad River, Stillwater River, and Wolf Creek, which there unite with the Miami.

Another journey into the heart of picturesque Ohio may be made on the banks of the Scioto River, beginning at Portsmouth, on the Ohio, the terminus of one of the chief of the canals to which so much importance was once attached. The region of the main river is so full of interest that it will not be found easy to stray off on branch streams. Yet some of these remote tributaries have decided claims to attention. Those who find themselves in the edge of Highland County on the west will observe a deep gorge, frequently one hundred feet deep, that extends for two miles on Rocky Fork of Paint Creek. Those who study the gorge, especially at the Narrows, and note the caves in the rocky walls will not be surprised that this region has been called Ohio's wonderland.

Another excursion may be made up a tributary of

the Scioto into Hocking County, a region nestling deep in the hills, which hides curiosities like Rock House, a passage of moment far up in a wall of sandstone. And six miles away is Ash Cave, formed by a lofty cliff whose summit projects far enough to help enclose a semicircular grotto of great size. All about this wonder is a rugged and appealing country.

Back on the main stream is Chillicothe, the residence city that took its name from the old Indian town located twelve miles to the northwest. From its beginning in 1796 it has rejoiced in a delightful situation. The Scioto Canal took possession of one of the main streets near the river, and so added to the picturesqueness of the place.

The country north of Chillicothe perpetuates the name of the famous Pickaway Plain, revered by the pioneers because of its combination of fertility and beauty. And just beyond is the town of Circleville, so named because it is on the site of an ancient town which was enclosed by a double circular wall of earth, with a ditch between the walls. When the modern town was planned in 1811 the court-house was given the place of honor at the heart of concentric circular streets, crossed by radiating streets which led to the central circle.

In 1810 commissioners appointed to select a site for the capital city of Ohio went thirty miles farther up the Scioto to the point where a branch stream enters the river. Franklinton, a town laid out in 1797, was on the west side of the river, but the final decision was in favor of an elevated location on the east bank, a portion of the Refugee Lands set apart by Congress for the benefit of Canadians and Nova Scotians who, in the

Revolution, chose to be faithful to the United States. The company that gave the site for the state-house held its first auction sale of lots on the day the United States declared war for the second time against England. It had already set apart for the Capitol ten acres on an eminence above the graceful bend made by the river as if it would approach to meet the stately building that was erected there. Visitors to Columbus to-day admire the central site as well as the conservatism of a wealthy state that retains an old building, valuing the historic associations of a structure that, when it was built, was the largest of all state capitols.

Out of that building, one day in 1851, the Legislature hurried to take passage on the first railway train that ran over the new road to Cleveland. And as they rode they sang a wonderful song:

"The iron horse snorted, he puffed when he started,
At such a long tail as he bore;
And he put for the city that grows in the woods,
The city upon the Lake Shore.

"The mothers ran out, with their children about,
From every log cabin they hail;
The wood-chopper, he, stood delighted to see
The law-makers ride on a rail."

That classic expression of popular exuberance is worthy to stand with that other song of the delegates to the 1840 state convention in Columbus. There was a parade, and the central feature was a log cabin built of buckeye logs, from Clark, Springfield's county. On the roof were singers who asked:

"O where, tell me where,
Was your buckeye cabin made?"

After the reply had been given, the purpose of the structure was told:

"We'll wheel it to the Capitol and place it there elate,
For a token and a sign to the Bonnie Buckeye State."

One of the streams along whose banks the buckeye-tree flourishes is the Hocking, and the wanderer along its banks will find that it, also, flows through a country where every prospect pleases. The course through Athens County is worth talking about, and the scenes in Hocking County—the county of the cavern in the hills already reached by an excursion from the Scioto—linger in the memory. And in Fairfield County, but beyond the river, near Lancaster, there is a height which the Indians called Standing Stone, though later residents spoke of it as Mount Pleasant, from whose summit the country for miles around may be viewed with ease and delight.

At least one more of the rivers of the Buckeye State should be traced by the man who wishes to become acquainted with it throughout—the Cuyahoga River, in the heart of Connecticut's Western Reserve, at whose mouth Moses Cleaveland paused in 1796 and laid the foundations of the city that took his name—all but one superfluous letter.

The Cuyahoga was the starting-point for another of Ohio's wonderful canals, built to connect Lake Erie with the Ohio. One of the important points on the canal was Akron, just across Portage Hill from the point where the river changes its course to the east. There the canal crossed to the valley of the Muskingum. The lakes used as a reservoir, and the towing-path on floating bridges across Summit Lake, which became a part of the canal, distinguished the town long before rubber tires made it great.

Akron—whose marvellous growth has made it one of the leading cities of Ohio—is in a country of comfortable rounded slopes, where the hills of the south, nearer

the Ohio River, become gentle undulations, with easy ascents and curves of so many kinds that the seeker after beauty is fascinated: direct curves, reverse curves, compound curves, lines of grace everywhere. Here and there among these slopes bits of woodland call enticingly to the passer-by to enter the shady aisles where the sunlight peeps daintily down, making a shifting checkerboard of the lush vegetation. Then comes a meadow, where wild flowers grow in lavish profusion—fitting approach for a meandering stream where cattle wade in the shallows. Down in the corner of the meadow the waters have cut their way through a gentle rise; there they make a cool swimming-hole in the shadow of a great tree whose tangled roots supply ready-made jumping-boards for amateur divers. Back from the pool, in the heart of the meadow, are other trees, single or in clusters, whose graceful branches have developed without the hampering touch of crowding neighbors or the misdirected efforts of the pruner, who, too frequently, is nothing but a butcher of beauty.

Summit and Portage counties share the best of the Cuyahoga. In the former county, in the neighborhood of Cuyahoga Falls, the stream falls more than two hundred feet in a little more than two miles, passing through a rocky gorge which the Indians called Coppacaw. The wild, picturesque surroundings are a reminder of the country of the hanging valleys, near Ithaca, New York.

And over in Portage County, near Ravenna, is the scene of Samuel Brady's famous legendary leap. Pursued by the Indians, he approached the stream where it flows through a deep gorge that is more than twenty-five feet wide, with cliffs dropping sheer to the water,

thirty feet below. The Indians exulted. "Good-by to Great Snake!" they cried. But the undaunted Brady gathered himself for a mighty effort, sprang into the air, and landed safely on the other side, thus beating for a century the world's record for the broad jump. Before the Indians could cross by the ford, lower down the stream, he made his way to the lake which still bears his name, and there hid under a clump of water-lilies. The savages traced him to the lake, and, after waiting for hours, decided that the man had drowned. Then Brady emerged, having kept himself alive under water by breathing through the hollow stem of a lily.

One story like that ought to satisfy Ohio. But it doesn't; they tell there of a companion of Daniel Boone who made a leap across the Little Miami, at a place where the water narrows for a passage between rocky cliffs. But that story does not have the attestation of the tale of Brady's leap—the chasm, the lake, and the monument near the spot where he outwitted his pursuers beneath the lilies.

Students of Ohio geography and history have noted the fact that, in most instances, the early towns were located on streams or on Lake Erie; in the days before the railroads water transportation seemed all-important. Yet here and there is an exception to the rule. Mansfield is an inland town, though its neighbor, Perryville, is on the small Mohican River. Busy Mansfield is better known to-day than Perryville, but once the latter town was more important, for it was the headquarters of Johnny Appleseed, the kindly eccentric, whose ruling ambition was to plant and tend apple-trees by the roadside, that the men and women and children of future generations might have fruit. In 1915 the children of

IN RURAL OHIO

GREAT GORGE OF THE LITTLE MIAMI RIVER

the country schools gave their nickels for the erection, at Ashland, the county-seat, of a boulder monument to "The Patron Saint of American Orchards."

The tale of water journeys in Ohio has not been exhausted. There are scores of opportunities for them. And everywhere they are made there will be an accompaniment of natural beauty and absorbing tales of history. If the traveller follows the small stream that enters the Ohio, near Marietta, east of the mouth of the Muskingum, he will come to Caldwell, where oil and gas were discovered in 1816, the beginning of a development that filled the valley of Duck Creek with derricks that were active until the outbreak of the Civil War. If he goes up the Auglaise River from Defiance on the Maumee and then up the Blanchard he will approach Findlay, the centre of the natural gas and oil development that began in 1884. When he goes to Darke County he will find, at Greenville, on a tributary of the Great Miami, the spot where in 1795 General Wayne made his treaty with the Indians by which a vast territory was ceded to the United States. In the next county to the south, at Eaton, on another tributary of the Great Miami, he will discover the site of Fort St. Clair, one of the chain of forts from the Ohio to the Maumee. And when he proceeds to the mouth of the same Maumee, he will find himself at Toledo, the city that, in 1834, one year after it was founded, was located on a map of Michigan! Michigan wanted the strip of land that included the harbor at the mouth of the Maumee, and she thought she had a right to it because of the provisions of the Ordinance of 1787. But Ohio thought differently. In 1835 armed forces from the two states threatened each other, but fortunately there was no bloodshed.

The trouble was not settled until Michigan was offered statehood on the condition that won for her the scorned Northern Peninsula. In 1915 the final act in the controversy was staged; then the governors of both states spoke and shook hands at the time of the planting of the boundary-post that marked the eastern end of the accepted boundary-line.

To the south of that line Toledo reigns proudly, astride the river and beside the lake, sending out and receiving a vast commerce, manufacturing, among other things, automobiles and glass, delighting in her parks and boulevards, bragging of her homes, her churches, and her magnificent white marble Museum of Art, and declaring that her unrivalled school system enables her to take a leading place in the state that received her intellectual birthright from the New England pioneers.

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